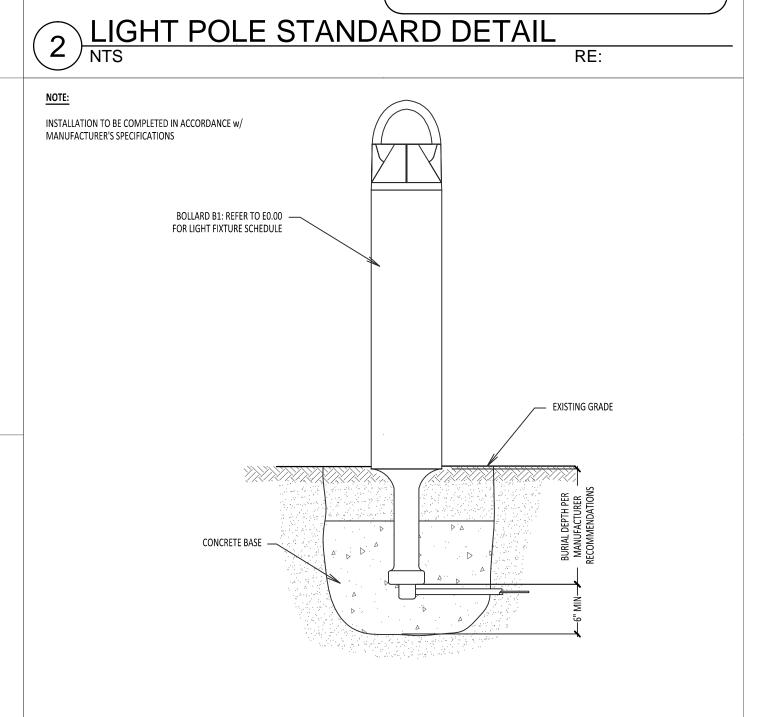


POLE & FIXTURE - SEE FIXTURE SCHEDULE - E0.00 PROVIDE FUSE(S) IN CIRCUIT BALLAST. FUSE SIZE AS REQ'D. BY LUM. MFR. 1)— FURN & INSTALL IN-LINE BALLAST FUSES IN BUSSMAN "TRON" WEATHERPROOF FUSE HOLDERS FURN & INSTALL IN-LINE BALLAS I FUSES IN BUSSIVIAIN TROIT WAS IN #HEB-AD W/ #KTK FUSES (SIZE AS REQ'D FUSE EA LUMINAIRE SEP. 3— 3) 4x6 GASKETED HAND HOLE; GROUND LUG ACCESSIBLE INSIDE HANDHOLE 4 4 CONNECT GROUND TO POLE LUG —6 S BUSH CONDUIT ENDS ──⑦ ⑥ BASE COVER PROJECT ANCHOR BOLTS ABOVE TOP OF BASE. INSTALL PER MANUFACTURERS INSTRUCTIONS. PROVIDE DBL. NUTS FOR LEVELING UNIT (ONE ABOVE & ONE BELOW BASE FLANGE). GROUT VOID BETWEEN BASE FLANGE & TOP OF CONC. AFTER LEVELLING - HAND FINISH SMOOTH -TEMPLATE TO BE FURNISHED BY POLE MFR. 8 1" 45° CHAMFER 9 #3 TIE BARS 2" FROM TOP OF CONC. 11) SEE ELECTRICAL PLAN FOR BRANCH CIRCUIT AND LIGHT CONTROL, INCLUDE ADEQUATE EGC. 10 (4) #7 BARS VERT.
13 #3 BARS 10" O.C. TIED TO VERT. BARS (14) REINFORCED CONCRETE BASE BY ELECT. CONTRACTOR LIGHT POLE SCHEDULE 1. ALL SELECTED FLOODLIGHTS, PARKING LIGHTS, AND LANDSCAPE LIGHTS SHALL BE UL LISTED 2. LIGHT SHALL BE ARRAIGNED TO REFLECT LIGHT AWAY FROM ABUTTING OF ADJACENT RESIDENTIAL LAND USE OR PUBLIC RIGHT-OF-WAY. ALL SELECTED POLES SHALL EXCEED LOCAL BASIC WIND SPEED AT 33 FT. W/GUST OF 1.3

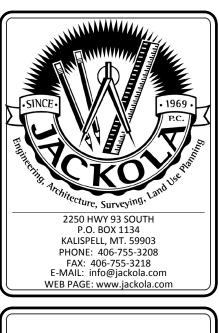
3. THIS DETAIL HIGHLIGHTS THE LIGHTING CONCEPT ONLY, COORDINATE LIGHT FIXTURE
ARRANGEMENT WITH SITE PLANS AND ARCHITECTURAL ELEVATION PLANS AND SHALL COMPLY
WITH NEC 410 & 600.

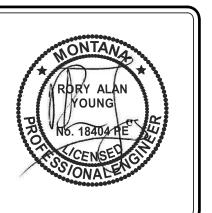
ALL SELECTED POLES SHALL EXCEED LOCAL BASIC WIND SPEED AT 33 FT. W/GUST OF 1.3
RATING. TOTAL EFFECTIVE LUMINARE/BRACKETRY WEIGHT SHALL BE WITHIN SPECIFIED
WIND RATING OF POLE/HEIGHT SELECTED.



3 LIGHT BOLLARD DETAIL





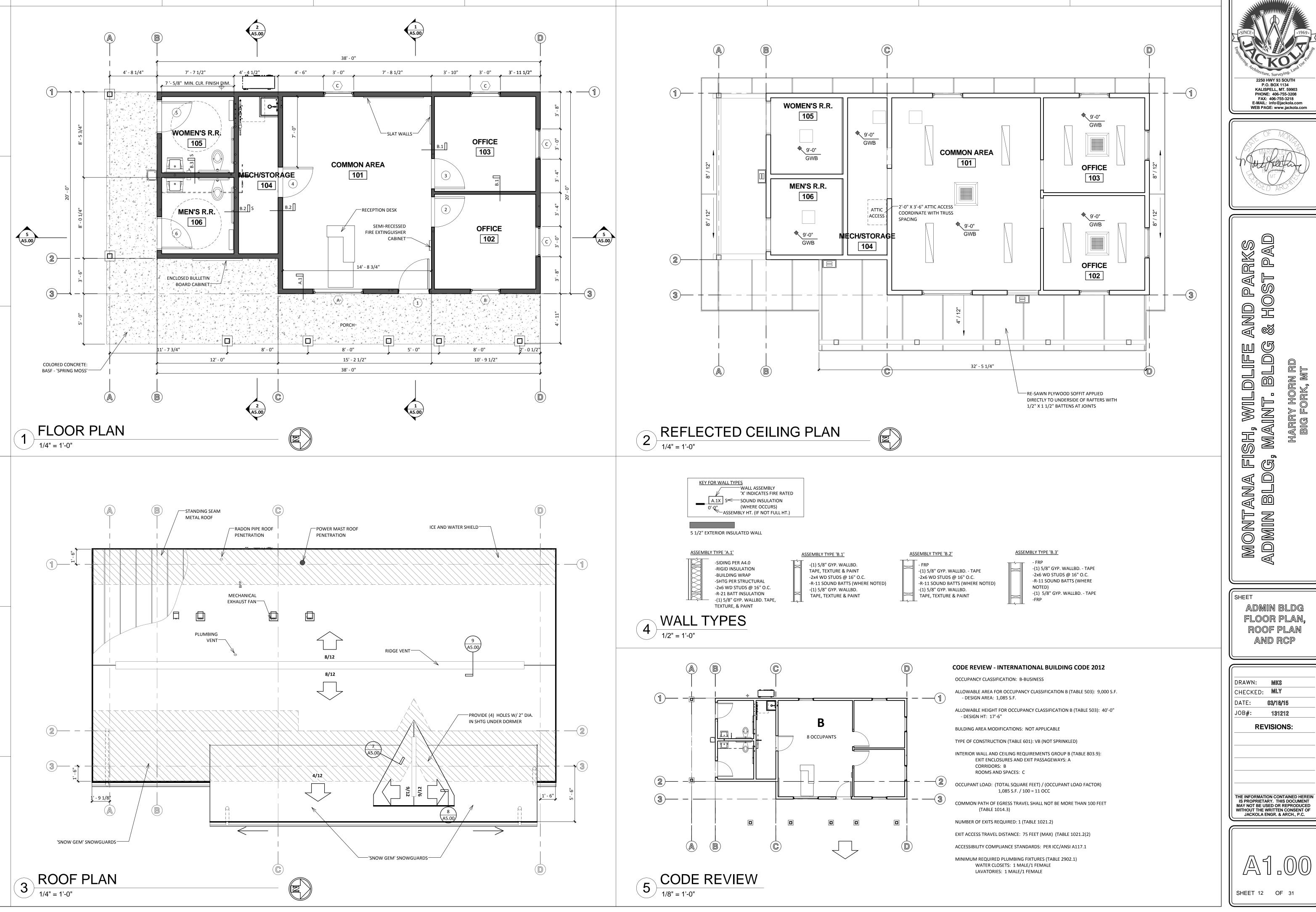


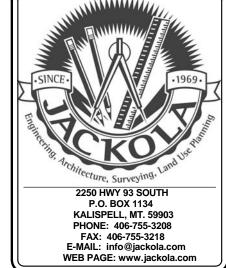
AND PARKS ISOH MONTANA F ADMIN

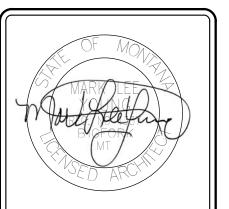
SHEET GENERAL NOTES AND DETAILS

DRAWN:	EMS
CHECKED:	RAY
DATE:	03/18/15
SCALE	as noted
JOB#:	131212
REV	/ISIONS:







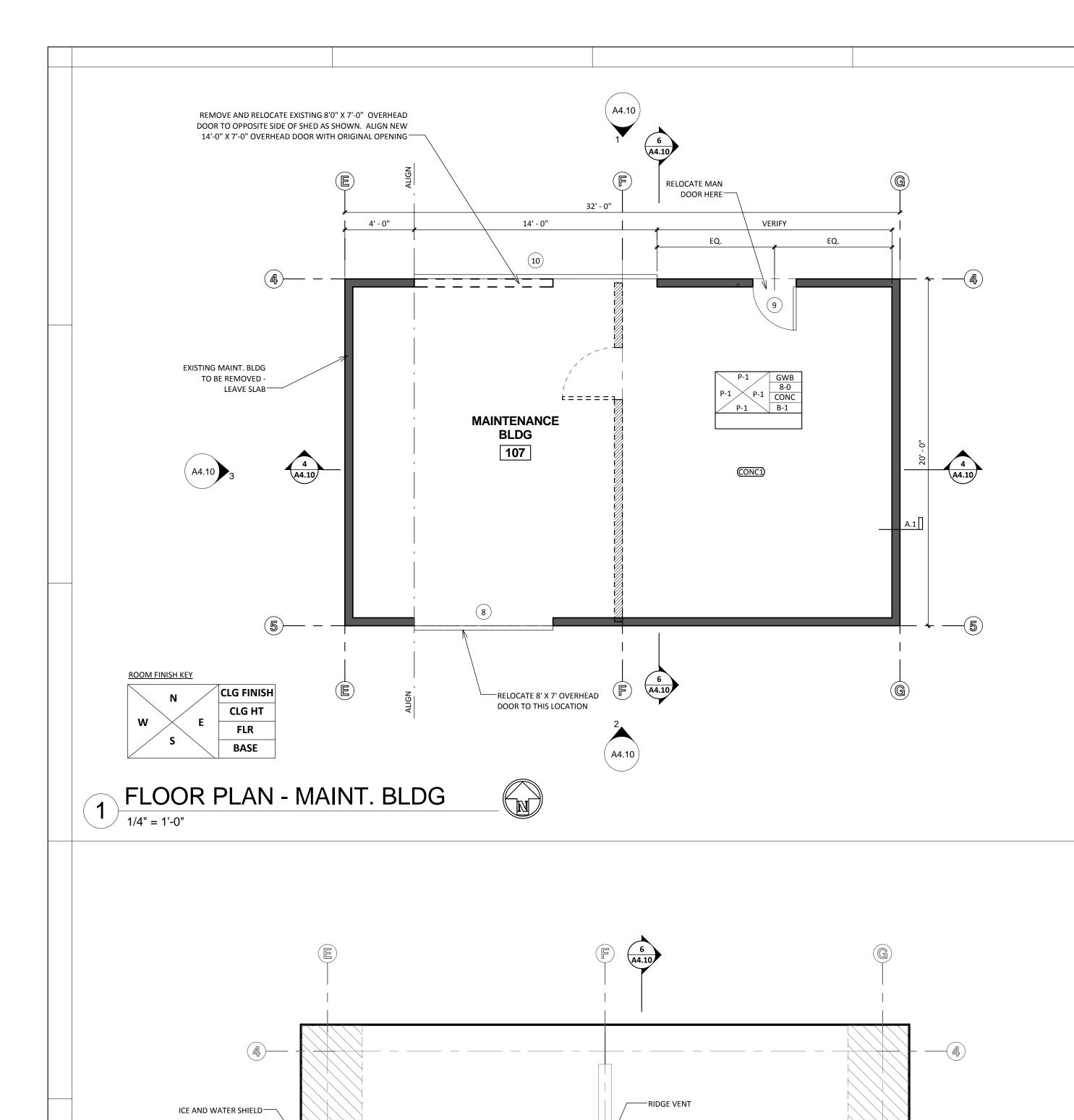


FISH, WILDLIFE G, MAINT. BLDG **D**G,

ADMIN BLDG FLOOR PLAN, ROOF PLAN AND RCP

DRAWN: MKS CHECKED: MLY DATE: 03/18/15 131212 **REVISIONS:** 

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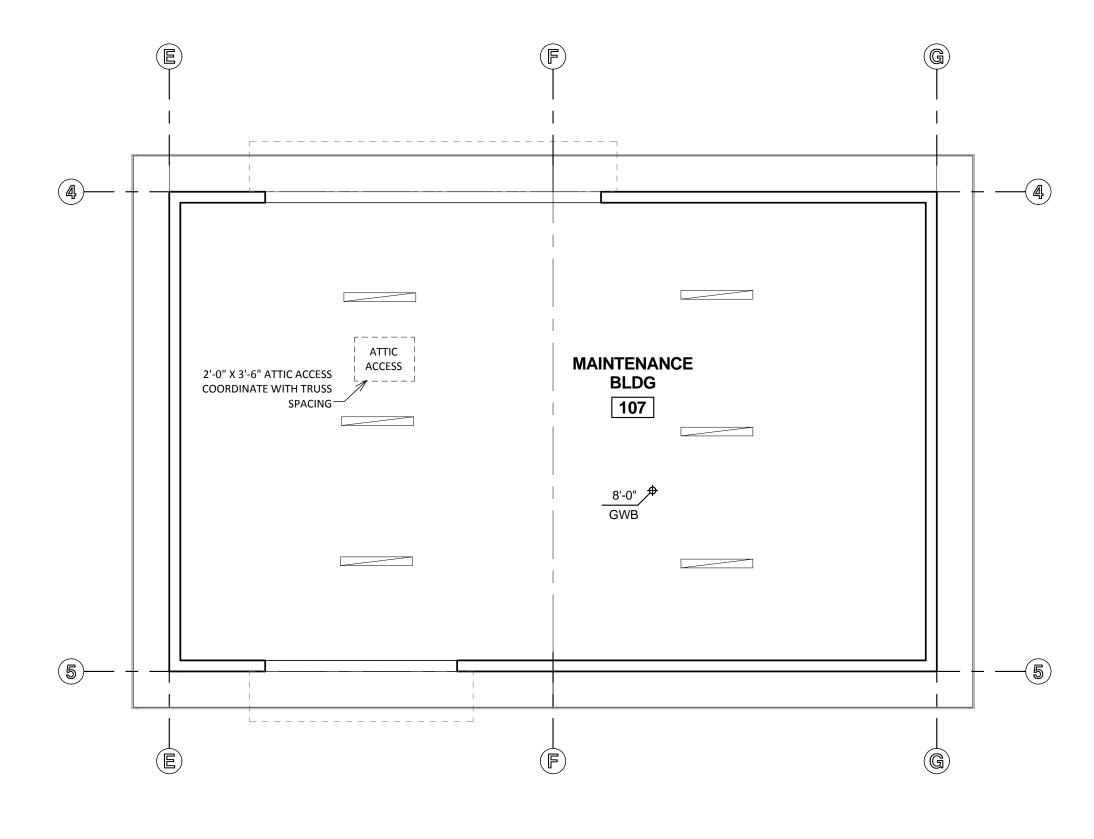


STANDING SEAM

METAL ROOF

ROOF PLAN - MAINT. BLDG

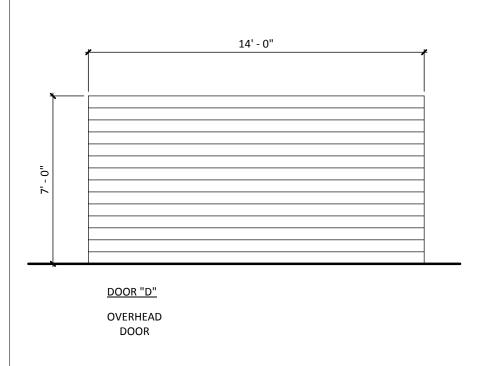
1/4" = 1'-0"



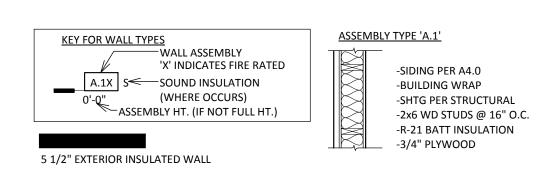
2 REFLECTED CEILING PLAN - MAINT. BLDG

1/4" = 1'-0"

DOOR SCHEDULE-MAINT. SHED										
DOOR NO.	FROM	то	LABEL	SIZE	ТҮРЕ	DOOR MAT.	FRAME MAT.	LITE	HARDWARE GROUP	REMARKS
8		MAINTENANCE BLDG	107	8' x 7'	EXISTING					RELOCATE
9		MAINTENANCE BLDG	107	30" x 80"	EXISTING					RELOCATE
10		MAINTENANCE BLDG	107	14 x 7	D				BY DOOR MFR	

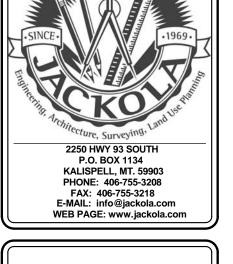


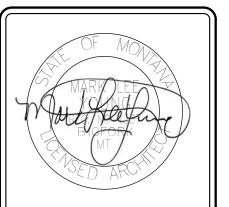
FINISH SCHEDULE - MAINT. BLDG							
TAG	KEY	COLOR	MANUFACTURER	STYLE	NOTE		
B-1	COVED RUBBER BASE	47 BROWN	JOHNSONITE				
CONC1	SEALED CONCRETE	NATURAL					
CONC2	COLORED CONCRETE	COBBLESTONE	DAVIS CONCRETE				
P-1	PAINT	'ARCHITECTURAL CREAM'	RALPH LAUREN	EGGSHELL			



WALL TYPES - MAINT. BLDG

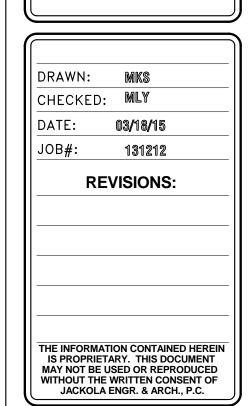
1/2" = 1'-0"





MONTANA FISH, WILDLIFE AND PARKS ADMIN BLDG, MAINT, BLDG & HOST PAD

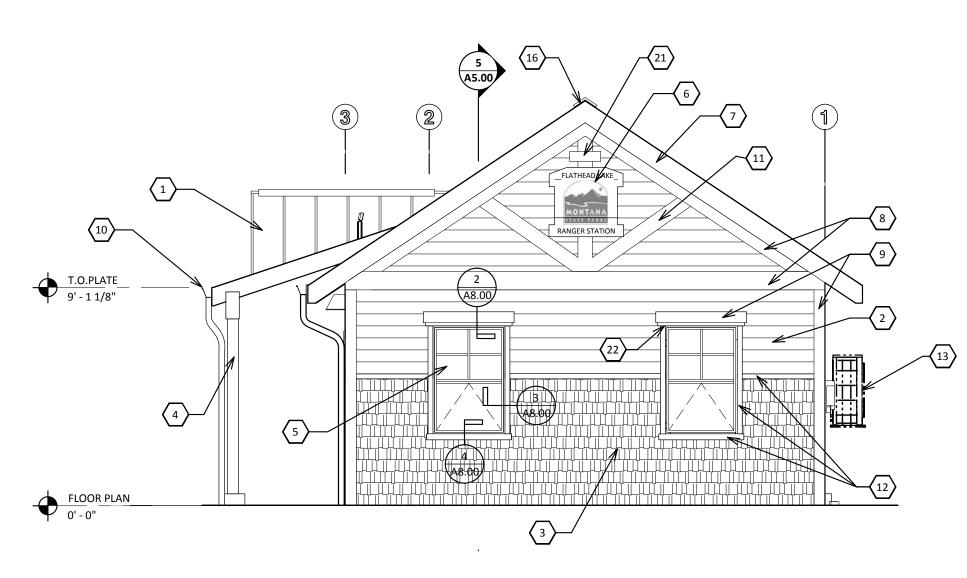
MAINT. BLDG FLOOR PLAN ADD ALT. 1



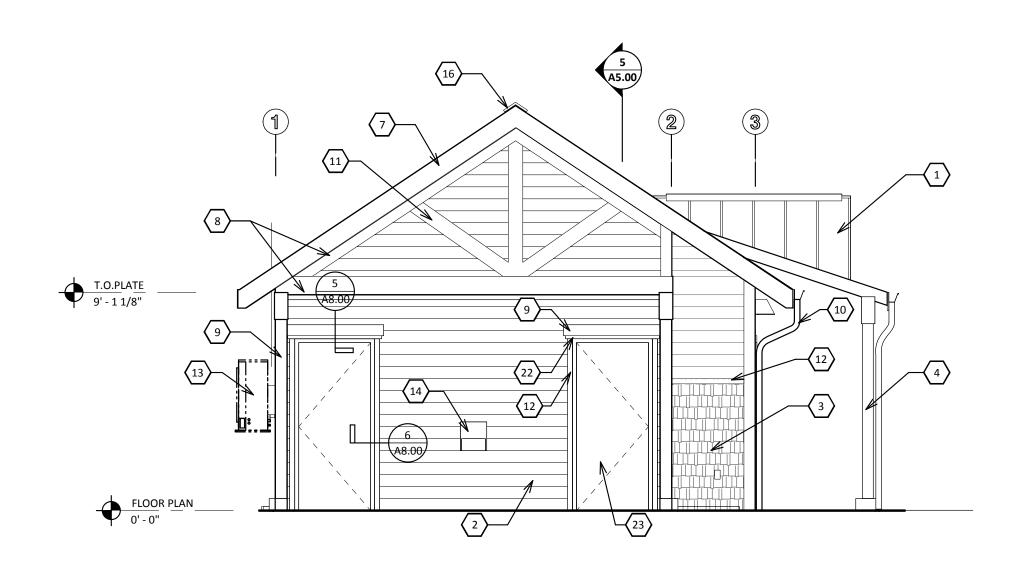
SHEET 13 OF 31

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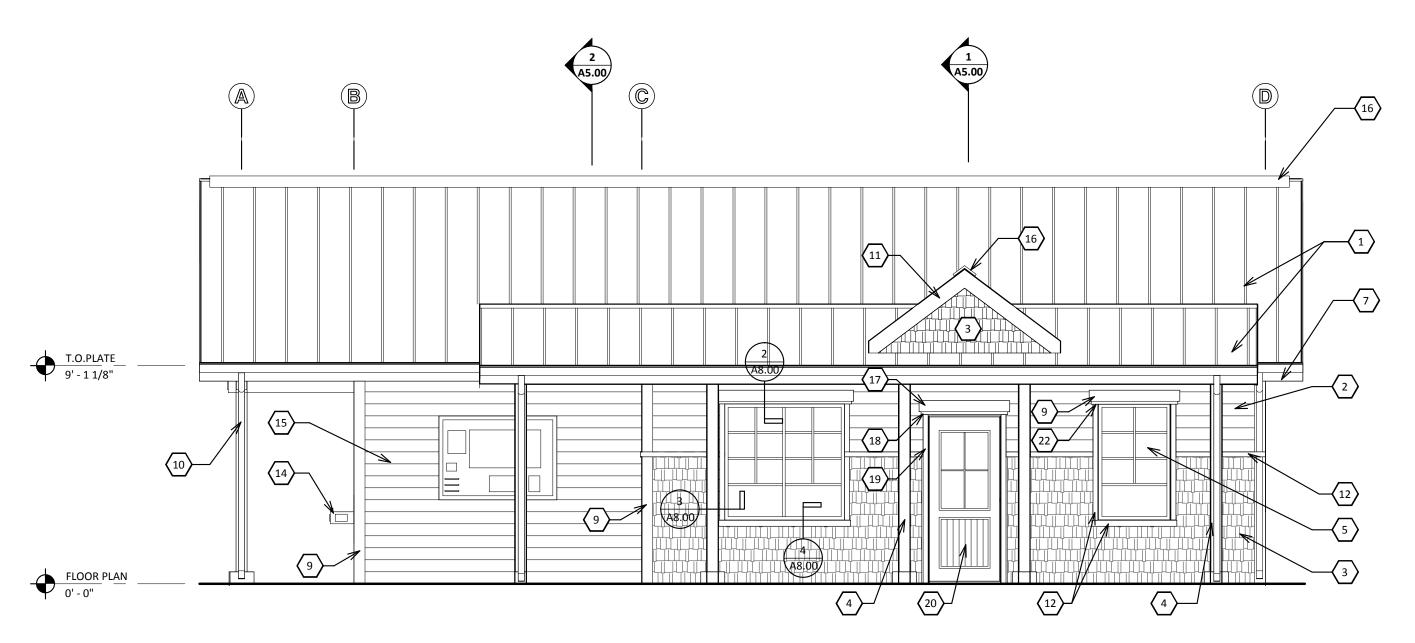
4 A4.10



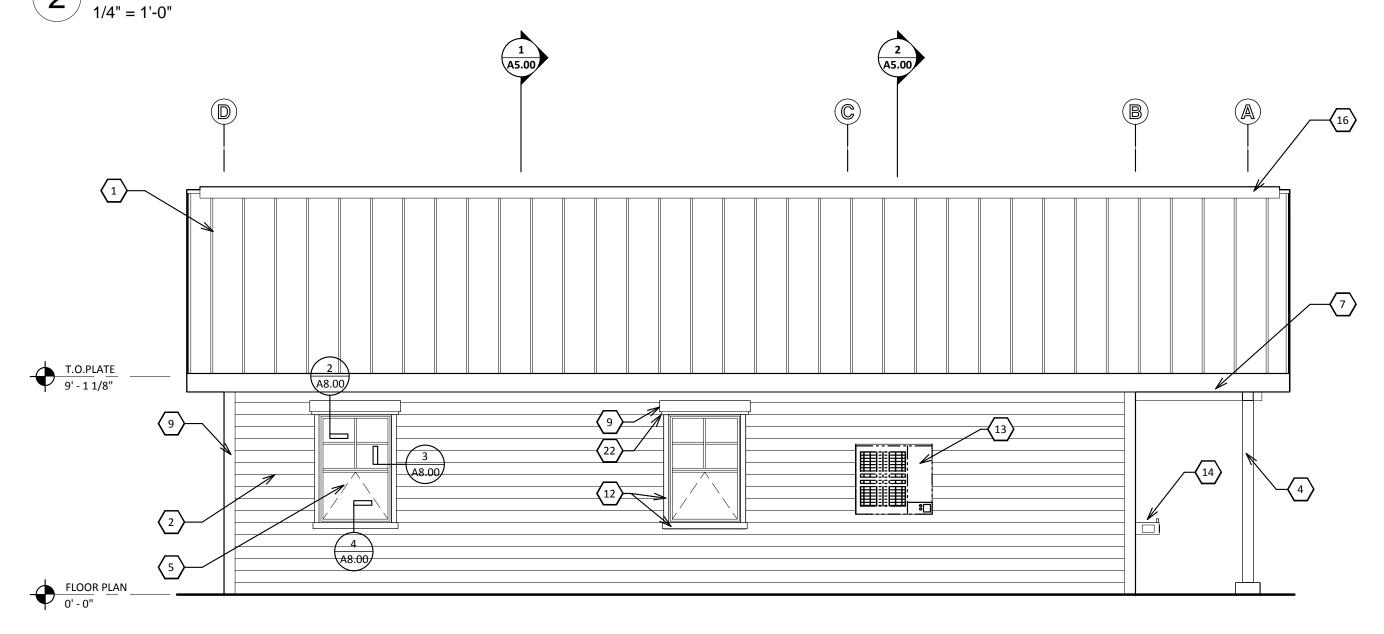
## 1 NORTH ELEVATION 1/4" = 1'-0"



# 3 SOUTH ELEVATION 1/4" = 1'-0"

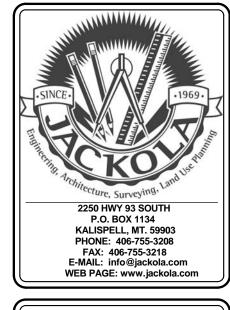


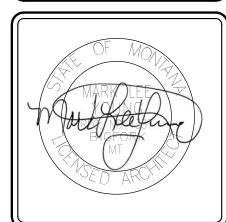
# 2 EAST ELEVATION 1/4" = 1'-0"



# WEST ELEVATION 1/4" = 1'-0"

	KEYNOTES
1	STANDING SEAM METAL ROOFING 'BONDERIZED'
2	FIBER CEMENT LAP SIDING - PAINT BENJAMIN MOORE - 'CHOCOLATE SUNDAE' 2113-10 (FLAT)
3	FIBER CEMENT SHAKES - PAINT BENJAMIN MOORE - 'CHOCOLATE SUNDAE' 2113-10 (FLAT)
4	6X6 WOOD POST - PAINT BENJAMIN MOORE - 'ALPINE WHITE' OC-124 (SEMI-GLOSS)
5	VINYL WINDOWS - FRAME 'FRENCH VANILLA'
6	BUILDING SIGNAGE BY OWNER - COORDINATE SIZE AND LOCATION WITH BUILDING LIGHT
7	5/4 X 10 FIBER CEMENT FASCIA - PAINT BENJAMIN MOORE - 'ALPINE WHITE' OC-124 (SEMI-GLOSS)
8	5/4 X 10 FIBER CEMENT TRIM - PAINT BENJAMIN MOORE - 'ALPINE WHITE' OC-124 (SEMI-GLOSS)
9	5/4 X 6 FIBER CEMENT CORNER TRIM - PAINT BENJAMIN MOORE - 'ALPINE WHITE' OC-124 (SEMI-GLOSS)
10	METAL GUTTER AND DOWNSPOUT- PAINT BENJAMIN MOORE - 'ALPINE WHITE' OC-124 (SATIN SHEEN)
11	5/4 x 8 FIBER CEMENT TRIM - PAINT BENJAMIN MOORE - 'ALPINE WHITE' OC-124 (SEMI-GLOSS)
12	5/4 x 3 FIBER CEMENT TRIM - PAINT BENJAMIN MOORE - 'ALPINE WHITE' OC-124 (SEMI-GLOSS)
13	MECHANICAL EQUIPMENT - SEE MECHANICAL PLANS FOR DETAILS
14	DRINKING FOUNTAIN - SEE PLUMBING PLANS FOR DETAILS
15	DISPLAY BOARD - SEE SHEET A8.00 FOR DETAILS
16	RIDGE VENT PER DETAIL 9/A5.00
17	5/4 X 6 SMART TRIM - STAIN CABOTS EXTERIOR SEMI-TRANSPARENT 'CHESTNUT BROWN'
18	5/4 X 2 SMART TRIM - STAIN CABOTS EXTERIOR SEMI-TRANSPARENT 'CHESTNUT BROWN'
19	5/4 X 4 SMART TRIM AT FRONT ENTRY - STAIN CABOTS EXTERIOR SEMI-TRANSPARENT 'CHESTNUT BROWN'
20	1/2 LITE WOOD DOOR - STAIN CABOTS EXTERIOR SEMI-TRANSPATENT 'CHESTNUT BROWN'
21	BUILDING LIGHT - SEE ELECTRICAL PLANS FOR DETAILS
22	5/4 X 2 FIBER CEMENT TRIM - PAINT BENJAMIN MOORE - 'ALPINE WHITE' OC-124 (SEMI-GLOSS)
23	HOLLOW METAL DOOR - PAINT BENJAMIN MOORE - 'ALPINE WHITE' OC-124 (SEMI-GLOSS)



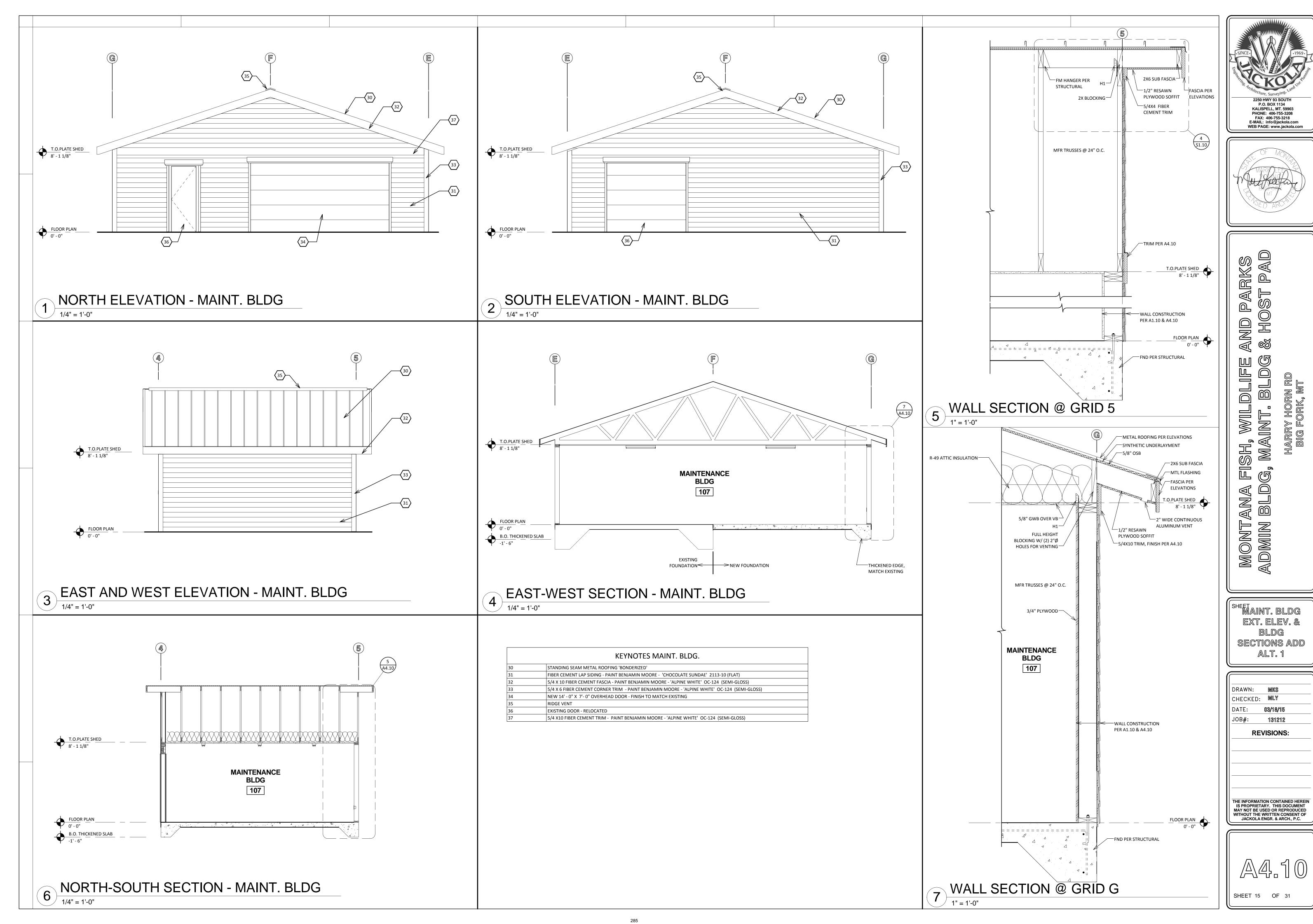


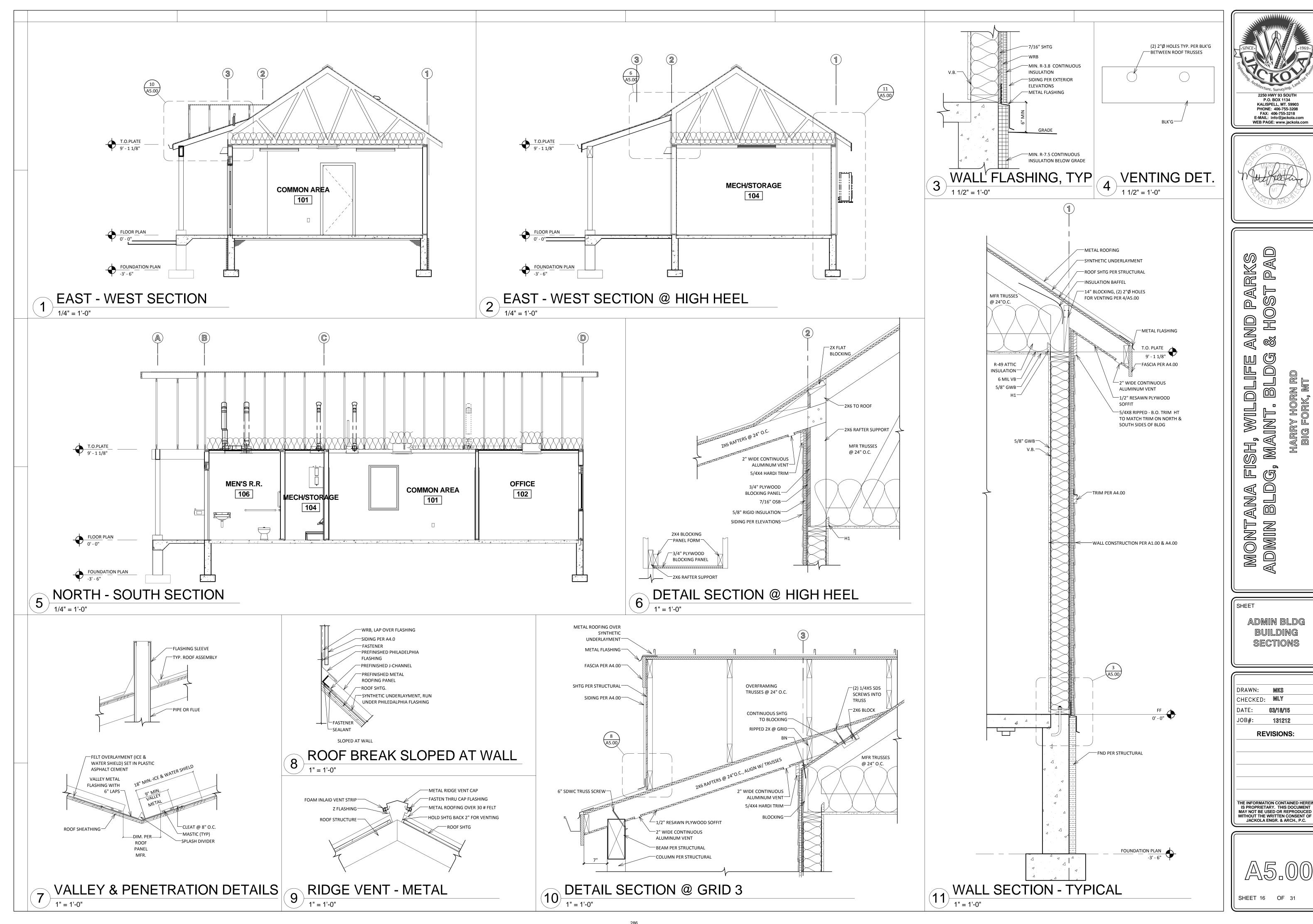
MONTANA FISH, WILDLIFE AND PARKS ADMIN BLDG, MAINT. BLDG & HOST PAD Harry Horn rd Big fork, Mt

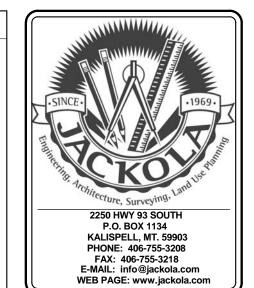
SHEET ADMIN BLDG EXTERIOR ELEVATIONS

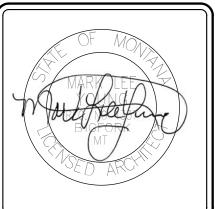
DRAWN: MKS CHECKED: MLY DATE: 03/18/15 JOB#: 131212 **REVISIONS:** THE INFORMATION CONTAINED HEREIN IS PROPRIETARY. THIS DOCUMENT MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JACKOLA ENGR. & ARCH., P.C.

SHEET 14 OF 31



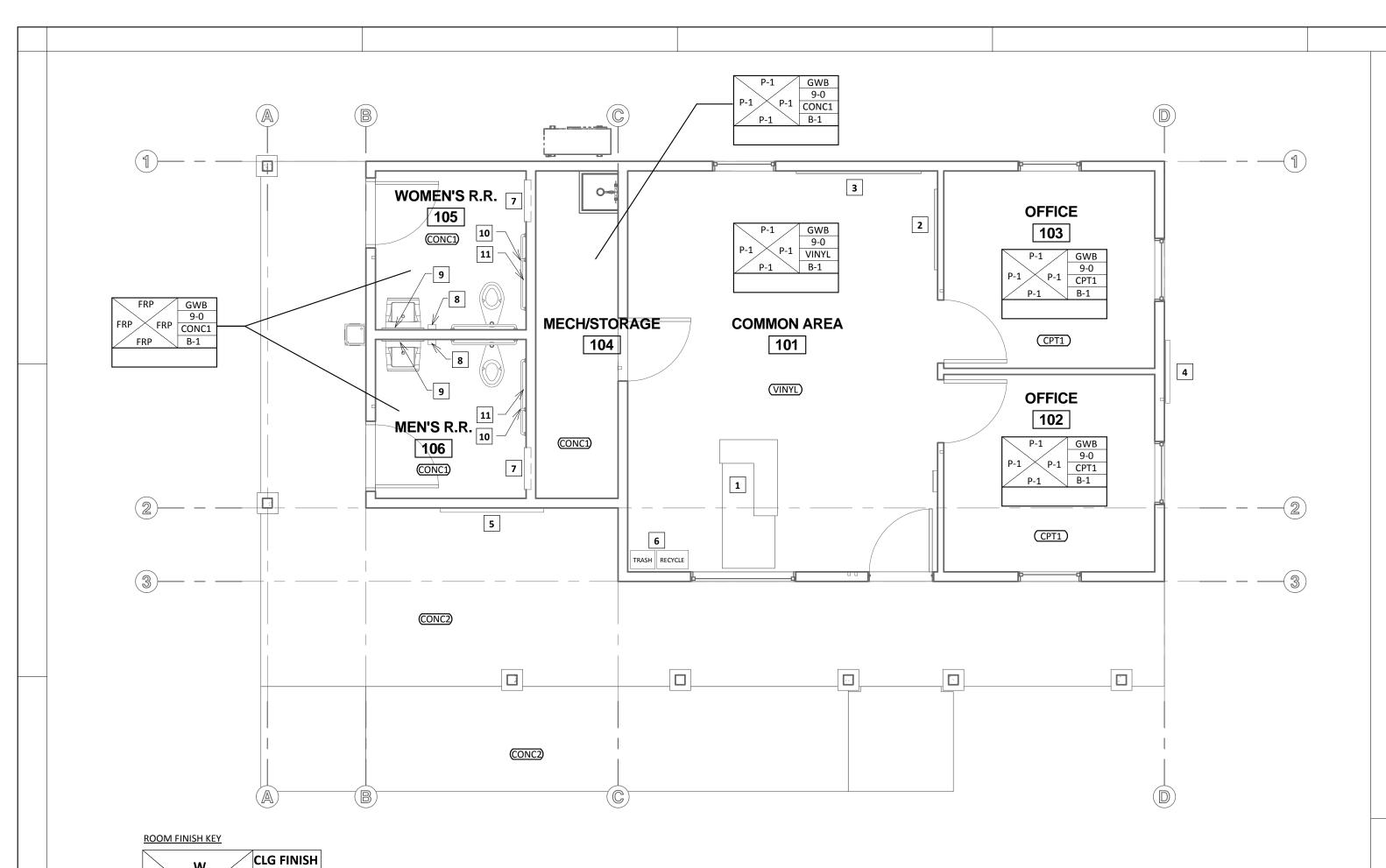






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CHECKED:	MLY
DATE:	03/18/15
JOB#:	131212
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IS PROPRIETA	ION CONTAINED HEREIN ARY. THIS DOCUMENT SED OR REPRODUCED
	WRITTEN CONSENT OF





	BAJE					
			FINISH SCHEDULE	:		
TAG	KEY	COLOR	MANUFACTURER	STYLE	NOTE	
B-1	COVED RUBBER BASE	47 BROWN	JOHNSONITE			
CONC1	SEALED CONCRETE	NATURAL				
CONC2	COLORED CONCRETE	COBBLESTONE	DAVIS CONCRETE			
CPT1	TILE CARPET	PLATFORM 9325 CHESTNUT	INTERFACE		1/4 TURN INSTALLATION	
FRP	FIBERGLASS REINFORCED PLASTIC	BEIGE	MARLITE	PEBBLED FINISH		
P-1	PAINT	'ARCHITECTURAL CREAM'	RALPH LAUREN	EGGSHELL		

EVOKE LUXURY VINYL

# 1 FINISH FLOOR PLAN 1/4" = 1'-0"

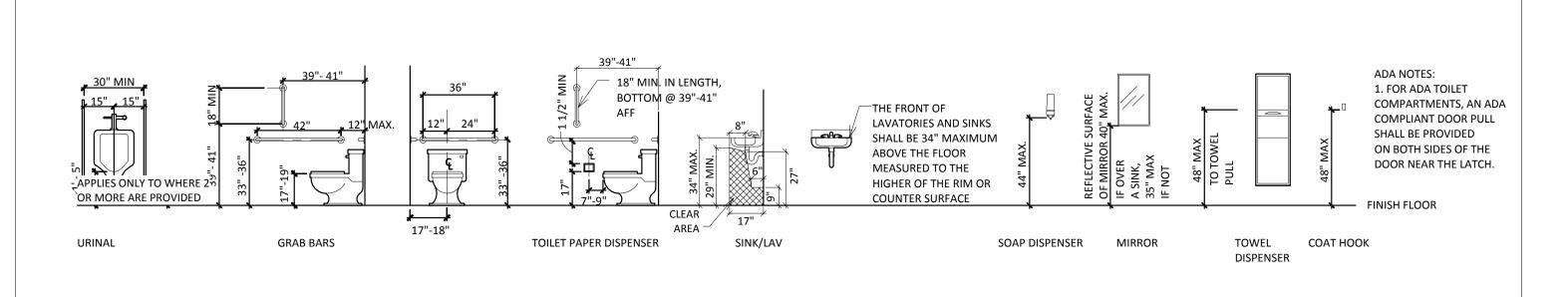
STUART-STICK - SKU 45011

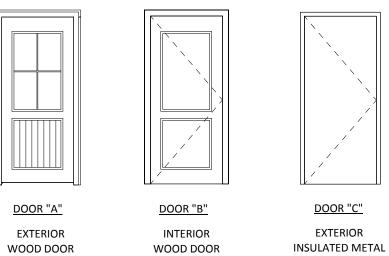
VINYL PLANK FLOORING

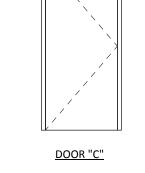
CLG HT FLR

FURNITURE AND ACCESSORIES SCHEDULE						
TAG	DESCRIPTION	COLOR	MANUFACTURER	SUPPLIED BY	INSTALLED BY	NOTES
1	L-SHAPE RECEPTION COUNTER WITH RACEWAY	CHERRY COUNTER/GRAY PANELS	GLOBAL INDUSTRIAL	CONTRACTOR	CONTRACTOR	www.globalindustrial.com (ITEM # T9F249011NCG)
2	4'-0" X 4'-0" SLAT WALL	GRAY HPL	US SLATWALL	CONTRACTOR	CONTRACTOR	www.usslatwall.com
3	6'-0" X 4'-0" SLAT WALL	GRAY HPL	US SLATWALL	CONTRACTOR	CONTRACTOR	www.usslatwall.com
4	BUILDING SIGN (SEE NORTH ELEVATION A4.0)	CUSTOM	-	OWNER	CONTRACTOR	
5	ENCLOSED BULLETIN BOARD CABINET	BLACK / CORK	DISPLAYS TO GO	CONTRACTOR	CONTRACTOR	www.displays2go.com (ITEM # P-20360)
6	TRASH/RECYCLING	-	-	OWNER	OWNER	
TOILET AC	CCESSORIES					
7	SURFACE MOUNTED PAPER TOWEL DISPENSER / WASTE RECEPTACLE	STAINLESS STEEL - SATIN FINISH	BOBRICK	CONTRACTOR	CONTRACTOR	www.bobrick.com (ITEM # B-3699)
8	SURFACE MOUNTED SOAP DISPENSER	STAINLESS STEEL - SATIN FINISH	BOBRICK	CONTRACTOR	CONTRACTOR	www.bobrick.com (ITEM # B-2111)
9	CHANNEL FRAME MIRROR	STAINLESS STEEL - SATIN FINISH	BOBRICK	CONTRACTOR	CONTRACTOR	www.bobrick.com (ITEM # B-165 2436)
10	GRAB BARS	STAINLESS STEEL - SATIN FINISH	BOBRICK	CONTRACTOR	CONTRACTOR	www.bobrick.com
11	TOILET TISSUE DISPENSER	STAINLESS STEEL - SATIN FINISH	BOBRICK	CONTRACTOR	CONTRACTOR	www.bobrick.com (ITEM # B-265)

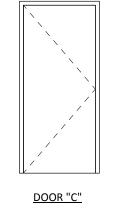
PLANK

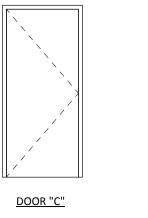


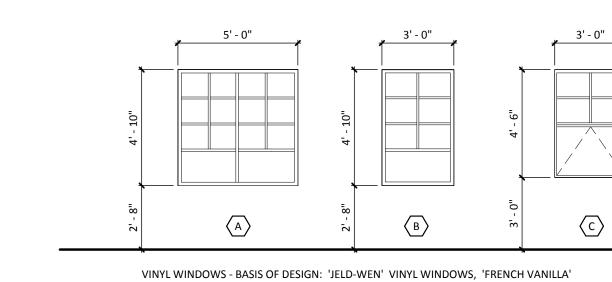




FLUSH DOOR

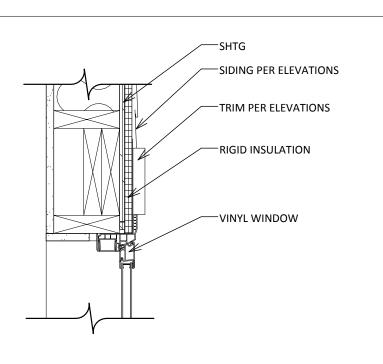


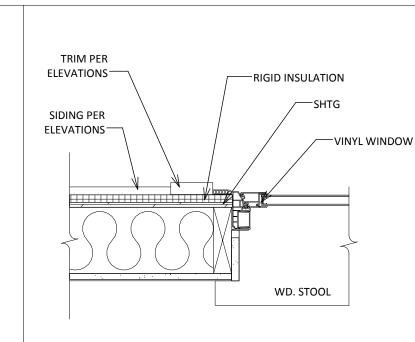


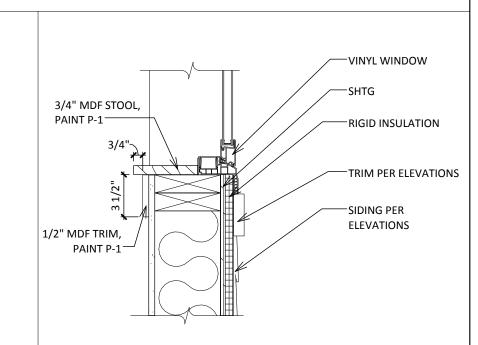


											,	
	DOOR SCHEDULE											
R NO.	FROM		то		LABEL	SIZE	ТҮРЕ	DOOR MAT.	FRAME MAT.	LITE	HARDWARE GROUP	REMARKS
										•		
1			COMMON AREA	101	-	3070 - 2-Panel	Α	WD	НМ	1/2 LITE	1	
2	COMMON AREA	101	OFFICE	102		36" x 84"	В	WD	MTL		2	
3	COMMON AREA	101	OFFICE	103		36" x 84"	В	WD	MTL		2	
4	MECH/STORAGE	104	COMMON AREA	101		36" x 84"	В	WD	MTL		2	
5			WOMEN'S R.R.	105		3-0" x 7'-0" x 1 3/4"	С	HM	НМ		3	
6			MENI'S R R	106		2_0" v 7'_0" v 1 2/4"	<u></u>	ни	ни		2	

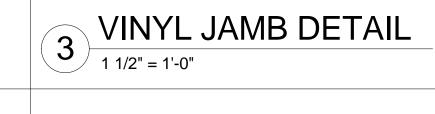
HARDWARE KEY						
HDW-1	HDW-2	HDW-3	HDW-4			
1 1/2 PR. BUTTS	1 1/2 PR BUTTS	1 1/2 PR BUTTS				
1 PASSAGE SET ANSI F-75	1 LOCK SET ANSI F-82	1 LOCKSET ANSI F-92				
BHMA N (PASSAGE)	BHMA B (OFFICE)	BHMA E (SERVICE STATION)				
1 DEADBOLT W/	1 WALL STOP	1 CLOSER				
THUMB TURN	1 SET SILENCERS	1 WALL STOP				
1 CLOSER		1 THRESHOLD				
1 THRESHOLD		WEATHERSTRIPPING				
1 WEATHERSTRIPPING		KICK PLATE (BOTH SIDES)				
1 WALL STOP		. ,				
1 KICK PLATE						



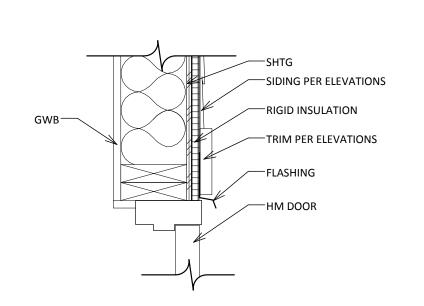




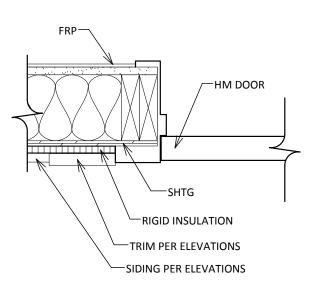
2 VINYL HEAD DETAIL
1 1/2" = 1'-0"



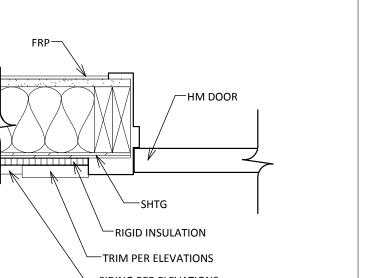








6 HM - JAMB DTL
1 1/2" = 1'-0"



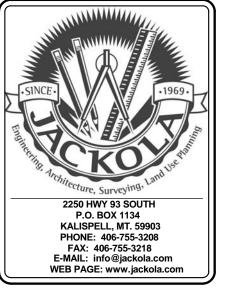
SHEET ADMIN BLDG FLOOR FINISH PLAN AND SCHEDULES

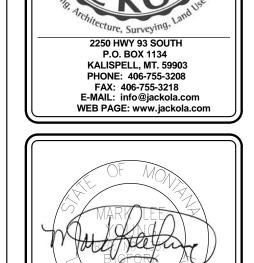
11		
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	CHECKED:	MLY
	DATE:	03/18/15
	JOB#:	131212
	RE	VISIONS:
4		

SHEET 17 OF 31

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AND PARKS & HOST PAD

FISH, WILDLIFE G, MAINT, BLDG

MONTANA [

AMERICAN CONCRETE INSTITUTE (ACI) - BUILDING CODE & COMMENTARY ACI 318-05

AMERICAN CONCRETE INSTITUTE (ACI) - BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES ACI 530-05 AMERICAN INSTITUTE STEEL OF CONSTRUCTION (AISC) - STEEL CONSTRUCTION MANUAL THIRTEENTH EDITION AISC 360-05 AMERICAN FOREST & PAPER ASSOCIATION (AF&PA) - NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION NDS 2005

AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) 9TH EDITION THE CONTRACTOR IS RESPONSIBLE FOR LOCATING OR HAVING LOCATED THE BUILDING ON THE SITE AND VERIFYING ALL FOUNDATION DIMENSIONS, AND SETBACK REQUIREMENTS FROM EASEMENTS AND PROPERTY LINES WITH THE ARCHITECT

2. DESIGN LOADS

PRIOR TO CONSTRUCTION

DESIGN LOADS	
1. ROOF DEAD LOAD	20 PSF
2. FLOOR LIVE LOAD	50 PSF
3. ROOF LIVE LOAD -	20 PSF
4. ROOF SNOW LOAD	
A. THE GROUND SNOW LOAD, Pg -	56.0 PSF
B. FLAT-ROOF SNOW LOAD, Pf -	46.0 PSF
C. SNOW EXPOSURE FACTOR, Ce -	1.0
D. SNOW LOAD IMPORTANCE FACTOR, I -	1
E. THERMAL FACTOR, Ct -	1.1
5. WIND LOAD	
A. BASIC WIND SPEED (3-SECOND GUST) -	115 MPH
B. WIND IMPORTANCE FACTOR-	1.0
C. BUILDING CATEGORY -	II
D. WIND EXPOSURE -	С
6. EARTHQUAKE DESIGN DATA	
A. SEISMIC IMPORTANCE FACTOR -	1.0
B. OCCUPANCY CATEGORY-	II
C. MAPPED SPECTRAL RESPONSE ACCELERATIONS Ss /	<u> </u>
D. SPECTRAL RESPONSE COEFFICIENTS SDS / SD1 -	.707/.336
E. SITE CLASS -	D
F. SEISMIC DESIGN CATEGORY	В
G. BASIC SEISMIC FORCE RESISTING SYSTEM-	LIGHT FRAMED WALL SYSTEM W/
	WOOD STRUCTURAL PANELS
H. BASE SHEAR	8 KIPS
I. SEISMIC RESPONSE COEFFICIENT Cs	.109
J. RESPONSE MODIFICATION FACTOR	6.5
K. ANALYSIS PROCEDURE USED	EQUIVALENT LATERAL FORCE

#### STRUCTURAL DESIGN INFORMATION

′ 1" = 1'-0"

1. ALL CEMENT IN CONCRETE TO CONFORM TO ASTM C150 SPECIFICATION FOR PORTLAND CEMENT. 2. ALL AGGREGATE TO CONFORM TO ASTM C33 SPECIFICATION FOR CONCRETE AGGREGATES

3. THE MAXIMUM NOMINAL AGGREGATE SIZE SHALL BE ONE FIFTH THE NARROWEST DIMENSION BETWEEN THE FORMS OR ONE THIRD THE DEPTH OF THE SLAB, OR THREE-FOURTHS THE MINIMUM CLEAR SPACING BETWEEN INDIVIDUAL REINFORCING BARS OR WIRES, WHICHEVER APPLIES. THESE PROVISIONS ARE TO ASSURE CONCRETE PLACEMENT WITHOUT VOIDS OR HONEYCOMBS AND MAY BE WAIVED ONLY BY THE BUILDING OFFICIAL IF THEY JUDGE THAT LARGER SIZES ARE ADEQUATE BECAUSE OF WORKABILITY AND METHODS OF CONSOLIDATION.

4. ALL REINFORCING BARS SPECIFIED SHALL BE DEFORMED BARS AT LEAST GRADE 60. 5. ALL FOUNDATION CONCRETE TO BE 3000 PSI MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS, CONCRETE RETAINING WALLS & SLAB TO BE 4000 PSI MIN. COMPRESSIVE STRENGTH. CONCRETE SUPPLIER TO MIX BASED ON HIS TESTING TO ASSURE THIS MINIMUM COMPRESSIVE STRENGTH PER ACI 318 SECTION 5.3. IN THE ABSENCE OF SUFFICIENT TEST DATA, CONCRETE PROPORTIONING SHALL BE DONE IN ACCORDANCE WITH ACI 318

SECTION 5.3.1.2, 5.3.2.2, 5.3.3.2, & 5.4. 6. CONCRETE CURING (OTHER THAN HIGH-EARLY) SHALL BE MAINTAINED ABOVE A TEMPERATURE OF 50°F AND IN A MOIST CONDITION FOR AT LEAST THE FIRST SEVEN DAYS AFTER PLACEMENT. HIGH EARLY CONCRETE SHALL BE CURED ABOVE 50°F AND IN A MOIST CONDITION FOR AT LEAST

THE FIRST THREE DAYS. 7. ADEQUATE EQUIPMENT SHALL BE PROVIDED FOR HEATING CONCRETE MATERIALS AND PROTECTING CONCRETE DURING FREEZING OR NEAR-FREEZING WEATHER. ALL CONCRETE MATERIALS, REINFORCEMENT, FORMS, FILLERS, AND GROUND WHICH THE CONCRETE IS TO BE IN CONTACT

WITH IS TO BE FREE OF FROST. FROZEN MATERIALS OR MATERIALS CONTAINING ICE SHALL NOT BE USED. 8. DURING HOT WEATHER, PROPER ATTENTION SHALL BE GIVEN TO INGREDIENTS, PRODUCTION METHODS, HANDLING, PLACING, PROTECTION, AND CURING TO PREVENT EXCESSIVE CONCRETE TEMPERATURES AND EVAPORATION THAT MAY IMPAIR REQUIRED STRENGTH OR SERVICEABILITY

OF THE MATERIAL 9. CONDUITS, PIPES, AND SLEEVES SHALL BE ALLOWED ONLY WHERE NOTED ON THE PLANS. ANY ADDITIONAL ALTERATIONS ARE NOT PERMITTED WITHOUT ENGINEER APPROVAL THAT IT WILL NOT COMPROMISE STRUCTURAL INTEGRITY.

10. THE SURFACE OF ALL CONSTRUCTION JOINTS SHALL BE CLEANED AND LAITANCE REMOVED. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, JOINTS SHALL BE WETTED AND STANDING WATER REMOVED. PROVISIONS SHALL BE MADE TO TRANSFER SHEAR FORCES THROUGH THE

11. ALL BENDING OF REINFORCING MATERIAL SHALL BE DONE COLD AND MINIMUM BEND DIAMETER SHALL BE 6 TIMES THE NOMINAL BAR DIAMETER FOR #3-#8 BAR AND 8 TIMES THE NOMINAL BAR DIAMETER FOR #9-#11 BARS. REINFORCEMENT PARTIALLY IMBEDDED IN CONCRETE MAY BE FIELD BENT

12. REINFORCEMENT, ANCHORS AND EMBEDDED ITEMS I SHALL BE ACCURATELY PLACED AND SUPPORTED BEFORE CONCRETE IS PLACED AND SHALL BE SECURED AGAINST DISPLACEMENT WITHIN TOLERANCES OF SECTION 1907.5 OF THE CURRENT VERSION OF CURRENT IBC 13. SEE 7/S3.0 FOR SITE PREP AND STRUCTURAL FILL REQUIREMENTS. 14. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING OR HAVING LOCATED THE BUILDING ON THE SITE AND VERIFYING ALL FOUNDATION

DIMENSIONS. AND SETBACK REQUIREMENTS FROM EASEMENTS AND PROPERTY LINES WITH THE ARCHITECT PRIOR TO CONSTRUCTION. 15. ALL WALLS & FOUNDATIONS SHALL BE MECHANICALLY CONSOLIDATED. VIBRATORS SHALL BE INSERTED IN PREVIOUS POURED FRESH CONCRETE TO PREVENT COLD JOINTS WHEN MULTIPLE LAYER OF CONCRETE ARE PLACED IN A WALL 16. INTERIOR SLAB ON GRADE SHALL BE CLASS 1 W/ A NORMAL STEEL TROWELED FINISH. TOTAL AIR CONTENT SHALL NOT EXCEED 3%. FLOOR

SHALL BE WITHIN 1/8" PER 10 FT FOR FLATNESS REQUIREMENTS. SLAB SHALL BE SEALED WITH A HIGH SOLID CONTENT SOLVENT BASED CURE & SEAL, EUCLID SUPER DIAMOND OR APPROVED EQUAL

17. CONCRETE IN SIDEWALKS OR EXTERIOR SLABS THAT WILL BE EXPOSED TO FREEZING/THAWING OR DEICING CHEMICALS SHALL HAVE A MINIMUM 0.45 WATER/CEMENTITIOUS RATIO BY WEIGHT FOR NORMAL WEIGHT AGGREGATE CONCRETE AND BE 4000 PSI MINIMUM A COLOR CHART FOR THE COLORED CONCRETE SHALL BE SUBMITTED FOR A SELECTION BY THE OWNER.

18. REFER TO TABLE BELOW FOR MINIMUM COVER AND TOTAL AIR CONTENT FOR CONCRETE IN DIFFERENT SERVICE CONDITIONS. 19. #5 BAR REQUIRED 2" CLEAR FROM TOP AND BOTTOM OF STEM WALLS AROUND FULL PERIMETER OF FOUNDATION, MIN. 20. STANDARD HOOK ON REINFORCING BAR SHALL BE:

- 180° BEND PLUS 4d EXTENSION, BUT NOT LESS THAN 2 1/2" AT FREE END OF BAR.

- 90° BEND PLUS 12d EXTENSION AT FREE END OF BAR. - FOR STIRRUP AND TIE HOOKS: SEE S3.0

21. MINIMUM REBAR LAPS - FOR #3-15", #4-20", #5-24 & #6-30" WITH A CLEAR SPACING OF NOT LESS THAN 2d AND CLEAR COVER OF NOT LESS THAN d. ALL OTHER SPLICES CONDITIONS SHALL BE BY THE EOR AND ILLUSTRATED ON S3.0

CONCRETE PROTECTION FOR REINFOR CAST-IN-PLACE CONCRETE (NON-PRESTRESSED)	RCEMENT
DESCRIPTION	MINIMUM COVER (IN)
COMPOSETE CACT ACAINICE & DEDAMANIANTIN EVDOCED TO FADTIL	
CONCRETE EXPOSED TO EARTH OR WEATHER:	3
CONCRETE EXPOSED TO EARTH OR WEATHER:	
No. 6 THRU No. 18 BAR	2
No. 5 BAR, W31 OR D31 WIRE AND SMALLER	1-1/2
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND:	
SLABS, WALLS, AND JOISTS:	
No. 14 AND No. 18 BAR	1-1/2
No. 11 BAR AND SMALLER	3/4
BEAMS AND COLUMNS:	
PRIMARY REINFORCEMENT, TIES, STIRRUPS, AND SPIRALS	1-1/2
SHELLS, FOLDED PLATE MEMBERS:	
No. 6 BAR AND LARGER	3/4
No. 5 BAR, W31 OR D31 WIRE AND SMALLER	1/2
CONCRETE TILT-UP PANELS CAST AGAINST A RIGID HORIZONTAL SURFACE	
SUCH AS A CONCRETE SLAB EXPOSED TO THE WEATHER:	
No. 8 BAR AND SMALLER	1
No. 9 THRU No. 18 BAR	2

TOTAL AIR CONTENT FOR FROST RESISTANT CAST-IN-PLACE CONCRETE				
NOMINAL MAXIMUM AGGREGATE SIZE	AIR CONTENT (%)			
3/8	7-1/2			
1/2	7			
3/4	6			
1	6			
1-1/2	5-1/2			
RECOMMENDED SLUMPS FOR CONSTRUCTION				

RECOMMENDED SLUMPS FOR CONSTRUCTION  CAST-IN-PLACE CONCRETE				
TYPE OF CONSTRUCTION	SLUMP MAX*/MIN			
REINFORCED FOUNDATION WALLS AND FOOTINGS	3/1			
PLAIN FOOTINGS, CAISSONS, AND SUBSTRUCTURE WALLS	3/1			
BEAMS AND REINFORCED WALLS	4/1			
BUILDING COLUMNS	4/1			
PAVEMENTS AND SLABS	3/1			
MASS CONCRETE	2/1			
* MAY BE INCREASED 1" FOR METHODS OF CONSOLIDATION OTHER THAN VIBRATION.				

#### 2 CONCRETE NOTES1

**WOOD IBC CHAPTER 23** 

1. GRADE STAMPED DOUGLAS FIR/LARCH (SEE LUMBER GRADES).

BORED TO A DIAMETER SMALLER THAN THAT OF THE NAIL.

2. NAILS: COMMON WIRE UNLESS OTHERWISE NOTED, EDGE OR END DISTANCES IN THE DIRECTION OF STRESS SHALL NOT BE LESS THAN ONE HALF OF THE REQUIRED PENETRATION. THE SPACING CENTER TO CENTER OF NAILS IN THE DIRECTION OF STRESS SHALL NOT BE LESS THAN THE REQUIRED PENETRATION. HOLES FOR NAILS, WHERE NECESSARY TO PREVENT SPLITTING, SHALL BE

3. ANCHOR BOLTS (FOUNDATION ANCHOR BOLTS): PROVIDE 5/8 INCH DIAMETER ANCHOR OR MACHINE BOLTS WITH A MINIMUM OF 7 INCHES EMBEDMENT INTO THE CONCRETE AND WITHIN 12 INCHES OF EACH END OF EACH PLATE. SPACE ANCHORS AT 48 INCHES ON CENTER UNO. ANCHORS SHALL BE LOCATED A MAXIMUM OF 2 INCHES FROM THE FACE OF STUD RECEIVING WOOD STRUCTURAL PANELS. ANCHOR BOLT HOLES 1/32 TO 1/16 INCH LARGER THAN THE ANCHOR BOLT DIAMETER. HOLES MORE THAN 1/16 INCH LARGER THAN THE ANCHOR BOLT SHALL BE EPOXY FILLED UNDER THE CONTINUOUS SUPERVISION OF A LICENSED SPECIAL INSPECTOR.

4. BOLTS: NOT LESS THAN 7 BOLT DIAMETERS FROM THE END AND 4 DIAMETERS FROM THE EDGE OF THE MEMBER. BOLT HOLES 1/32 TO 1/16 INCH LARGER THAN THE BOLT DIAMETER. ALL NUTS SHALL BE TIGHTENED WHEN INSTALLED AND RE-TIGHTENED AT THE COMPLETION OF WORK OR BEFORE CLOSING IN. THREAD PROJECTION SHALL BE 1/16 INCH MINIMUM BEYOND THE NUT. BOLTS IN SPECIFIED SLOTTED HOLES SHALL BE CENTERED IN THE SLOT UNO.

5. LAG SCREW CLEARANCE & LEAD HOLES SHALL BE BORED AS FOLLOWS: THE CLEARANCE HOLE FOR THE SHANK SHALL HAVE THE SAME DIAMETER AS THE SHANK, AND THE SAME DEPTH OF PENETRATION AS THE LENGTH OF UNTHREADED SHANK. THE LEAD HOLE FOR THE THREADED PORTION SHALL HAVE A DIAMETER EQUAL TO 60 % TO 75 % OF THE SHANK DIAMETER AND A LENGTH EQUAL TO AT LEAST THE LENGTH OF THE THREADED PORTION.

6. SQUARE STEEL PLATE WASHERS (PW): ANCHOR BOLTS, BOLTS, LAGS AND NUTS, NOTED PW, SHALL BE SQUARE STEEL PLATE

BOLT DIAM	THICKNESS	SIZE
(IN)	(IN)	(IN)
1/2	3/16	2 X 2
5/8	1/4	2 1/2X2 1/2
3/4	5/16	2 3/4X2 3/4
7/8	5/16	3X3
1	3/8	3 1/2X3 1/2

WASHERS:

7. CUT STEEL WASHERS: FOR BOLTS, LAGS AND NUTS, UNO.

8. FRAMING CONNECTORS: PER MANUFACTURER'S APPROVED PRODUCT EVALUATION REPORTS ICBO APPROVED AND INSTALLED ACCORDINGLY, SIZE AND NUMBER OF NAILS TO BE MAXIMUM SPECIFIED BY THE MANUFACTURER UNO.

9. NAILED/SCREWED HOLD DOWN ANCHORS: INSTALL PER MANUFACTURER'S APPROVED ICBO PRODUCT EVALUATION REPORT. INSTALL HOLD DOWNS 1/2 INCH MINIMUM ABOVE THE PLATE TO ALLOW FOR TIGHTENING ANCHOR BOLT. THE HOLD DOWN SHALL BE INSTALLED TIGHT TO THE HOLD DOWN POST WITHOUT FILLERS OR DAPPING. DO NOT BEND HOLD DOWN ANCHORS.

10. BOLTED HOLD DOWN ANCHORS: INSTALL PER MANUFACTURER'S APPROVED ICBO PRODUCT EVALUATION REPORT. INSTALL HOLD DOWNS 1/2 INCH MINIMUM ABOVE THE PLATE TO ALLOW FOR TIGHTENING ANCHOR BOLT. TIGHTEN HOLD DOWN ANCHOR BEFORE TIGHTENING POST BOLTS. USE EXTRA CARE IN BORING THE POST BOLT HOLES 1/32 TO 1/16 LARGER THAN THE BOLT DIAMETER. THE HOLD DOWN SHALL BE INSTALLED TIGHT TO THE HOLD DOWN POST WITHOUT FILLERS OR DAPPING. THE POST BOLTS SHALL NOT BE COUNTERSUNK INTO THE HOLD DOWN POST UNO. DO NOT BEND HOLD DOWN ANCHORS.

L1. PRESERVATIVE TREATED WOOD: WOOD EXPOSED TO THE WEATHER; FOUNDATION PLATES ON CONCRETE SLABS, FOUNDATIONS WHICH ARE IN DIRECT CONTACT WITH EARTH SHALL BE TREATED WOOD WITH PRESERVATIVE RETENTION AS REQUIRED FOR USE. NEWLY EXPOSED SURFACES RESULTING FROM FIELD CUTTING, BORING OR HANDLING SHALL BE FIELD TREATED IN ACCORDANCE WITH AWPA M-4.

12. TOP PLATES: TWO PIECES, SAME SIZE AS STUDS, STAGGER SPLICES AND CONNECT PER SCHEDULE.

13. FULL-DEPTH SOLID BLOCKING OR CROSS BRACING: INSTALLED AT INTERVALS NOT EXCEEDING 8 FEET FOR ALL JOISTS AND RAFTERS 2x12 AND DEEPER. SOLID BLOCKING OR I-JOIST BLOCKING SHALL BE INSTALLED AT WALL JOIST BEARING WHERE RIM JOISTS ARE NOT INSTALLED

14. SOLID BLOCKING: TWO INCH FULL WIDTH BLOCKING FIRE STOPS IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS AND AT 10-FOOT INTERVALS HORIZONTAL.

15. CUTTING AND NOTCHING: DO NOT CUT, BORE, COUNTERSINK OR NOTCH WOOD MEMBERS EXCEPT WHERE SHOWN IN THE DETAILS. HOLES THROUGH PLATES, STUDS AND DOUBLE PLATES IN WALLS SHALL NOT EXCEED 40 % THE MEMBER WIDTH AND SHALL BE LOCATED IN THE CENTER OF THE MEMBER. SEE DETAILS 8 & 9/ S2.0.

16. PARTITIONS: DOUBLE JOISTS UNDER PARTITIONS PARALLEL TO JOISTS AND PROVIDE SOLID BLOCKING UNDER PARTITIONS PERPENDICULAR TO JOISTS.

17. END SUPPORT: ROOF AND FLOOR JOISTS OVER 4 INCHES DEEP SHALL HAVE THEIR ENDS HELD IN POSITION WITH EITHER: FULL DEPTH SOLID BLOCKING; NAILED BRIDGING: NAILING OR BOLTING TO OTHER FRAMING MEMBERS; OR APPROVED JOIST HANGERS.

18. GALVANIZING: ALL EXPOSED STEEL TIMBER HARDWARE, FASTENERS AND CONNECTORS.

19.TRIMMERS AND HEADER JOISTS SHALL BE DOUBLED OR OF LUMBER OF EQUIVALENT CROSS SECTION WHERE THE SPAN OF THE HEADER EXCEEDS 4 FT.

20.NOT LESS THAN 3 STUDS OR LUMBER OF EQUIVALENT CROSS SECTION SHALL BE INSTALLED AT EACH CORNER OF ALL EXT. WALLS.

LUMBER GRADES DOUGLAS FIR/LARCH IBC CHAPTER 23 COMPLY WITH PS 20, AMERICAN SOFTWOOD LUMBER STANDARD AND STANDARD GRADING RULES FOR WESTERN LUMBER. 19% MAXIMUM MOISTURE CONTENT AT TIME OF PLACEMENT.

1. DIMENSION LUMBER: BLOCKING 2" TO 4" THICK, STANDARD

2. DIMENSION LUMBER: JOISTS & RAFTERS, 2" TO 4" THICK, NO. 2 AND BETTER. 3. BEAMS AND STRINGERS: 5" AND THICKER, NO. 1

4. POSTS AND TIMBERS: 5" BY 5" AND LARGER, NO.1 5. HOLD DOWN POSTS: NO. 1

WOOD STRUCTURAL PANELS PANEL - EXPOSURE I APA RATED

1. REFERENCES: PS1, PS2, APA STANDARD PRP-108, NATIONAL EVALUATION SERVICE REPORT NER-108 AND ICBO ES REPORT 1952. 2. WALL PANELS: PER SCHEDULE 3. ROOF PANELS: PER SCHEDULE

5. BLOCKING:

A) WALLS: ALL UNSUPPORTED PANEL JOINTS SHALL BE BLOCKED SOLID WITH 2x BLOCKING. B) FLOORS & ROOFS: WHERE NOTED ON THE DRAWINGS, ALL UNSUPPORTED PANEL JOINTS SHALL BE BLOCKED SOLID WITH 2x4 FLAT BLOCKING 6. NAILING: COMMON WIRE NAILS IN PANEL NAILS SHALL BE DRIVEN SO THAT THE HEADS ARE FLUSH WITH THE SURFACE OF THE PANEL. FIELD NAILING (FN) SHALL BE PER SCHEDULE AND THE MINIMUM PANEL EDGE DISTANCES SHALL BE MAINTAINED. 7. MACHINE NAILING: SUBJECT TO A SATISFACTORY JOB SITE DEMONSTRATION FOR THIS PROJECT AND REVIEW BY THE ENGINEER. THE USE OF MACHINE NAILING IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE, PANEL NAILS SHALL BE DRIVEN SO THAT THE

HEADS ARE FLUSH WITH THE SURFACE OF THE PANEL AND THE MINIMUM PANEL EDGE DISTANCES ARE MAINTAINED. 8. ALL FLOORS SHALL BE GLUED AND NAILED OR SCREWED: FIELD GLUE TO ALL SUPPORTS AND T&G EDGES PER APA, AFG-01. FRAMING SHALL BE FREE OF SURFACE MOISTURE & DEBRIS PRIOR TO GLUING. FLOORS SHALL BE SCREWED OR RING SHANK NAILED TO THE JOISTS. 9. WOOD STRUCTURAL PANELS (PANELS): WHERE ADJACENT WALLS ARE PANELED, PANELS SHALL BE INSTALLED OVER AND UNDER OPENINGS

COMMON WIRE NAILS							
SIZE	DIAMETER	WIRE	PENETRATIO				
PENNY	INCHES	GAGE	INCHES				
8d	.131	10-1/4	1-1/2				
10d	.148	9	1-5/8				
16d	.162	8	1-3/4				
20d	.192	6	2-1/8				
30 <b>4</b>	207	5	2-1//				

PENETRATION IS MEASURED INTO THE PIECE RECEIVING THE NAIL POINT. 1-1/2 INCHES OF PENETRATION FOR 10d AND 16d NAILS IS ACCEPTABLE FOR TOP PLATES AND DOUBLED 2X MEMBERS. WHERE THE NAIL PENETRATION WILL BE LESS THAN SPECIFIED, INCREASE NAIL LENGTH (SIZE) TO OBTAIN THE PENETRATION REQUIRED FOR THE NAIL SPECIFIED.

ALL HORIZONTAL SEAMS ON PANELED SHEAR WALLS TO BE BLOCKED AND VERTICAL SEAMS TO LIE ON A STUD LINE, ALL DIAPHRAGM BOUNDARIES TO BE 3x OR DBL 2x IF SPECIFIED IF SCHEDULED AND STAGGER NAILED PER SCHEDULE. SHEAR WALL DIAPHRAGM BOUNDARIES

ARE STRUCTURAL RESISTANCE LINES, I.E. SILL PLATES, TOP PLATES, TRIMMERS TO STRUCTURAL MEMBERS. PANEL EDGES ARE VERTICAL OR HORIZONTAL SEAMS, NOT ONE OF ABOVE. FIELD IS FASTENING AREAS WHERE MEMBERING OCCURS INSIDE PANEL EDGES. SHEAR WALL NAILS SHALL BE PLACED NOT LESS THAN 3/8" FROM THE PANEL EDGE. AND FIRMLY DRIVEN INTO FRAMING MEMBER WITHOUT CRUSHING THE SURFACE OF THE SHEETING WITH THE HEAD. SHEAR WALL SHEATHING MATERIAL TO BE MANUFACTURED USING EXTERIOR GLUE; IF PARTICLEBOARD, MINIMUM GRADE IS 2-M-F, IF FRAMED OPENINGS IN SHEAR WALLS SHALL CONSIST OF DOUBLE FRAMING MEMBERS WITH NO PANEL EDGES ALIGNING WITH THE FRAME LINE WITHIN 2'. THE EDGE NAILING SHALL BE 4" STAGGERED UNLESS A PATTERN IS SPECIFIED ON THE SHEAR WALL SCHEDULE. ALL LUMBER TO BE NUMBER 2 OR BETTER UNLESS SPECIFIED OTHERWISE. ALL BEAMS/HEADERS TO BE AS

STRUCTURAL CONNECTORS

SIMPSON STRONG-TIE IS SPECIFIED FOR ALL LIGHT GAUGE METAL CONNECTORS SUCH AS HOL-DOWNS, COLUMN CAPS & BASES, JOIST, TRUSS & BEAM HANGERS & CONNECTORS AND STRAPS & TIES UNLESS NOTED OTHERWISE. USP STRUCTURAL CONNECTORS ARE AN ACCEPTABLE SUBSTITUTION PROVIDED THE LOAD VALUE FOR THE UPS PRODUCT MEETS OR EXCEEDS THE SIMPSON PRODUCT. SUBMIT SUBSTITUTIONS FOR APPROVAL TO EOR.

### WOOD FRAMING NOTES

SPECIFIED, CONTACT ENGINEER FOR SUBSTITUTIONS SINCE ALLOWABLE STRESSES VARY

9. INTERIOR PANELING 1. COMMON OR BOX NAILS MAY BE USED EXCEPT WHERE OTHERWISE STATED 2. CORROSION-RESISTANT SIDING OR CASING NAILS CONFORMING TO TABLE 2304.9.1 OF IBC. 3. CORROSION-RESISTANT ROOFING NAILS WITH 7/16" DIA. HEAD AND 1-1/2" LENGTH FOR 1/2" SHEATHING AND 1-3/4" LENGTH FOR 25/32" SHEATHING CONFORMING TO TABLE 2304.9.1 OF IBC. 4. CORROSION-RESISTANT STAPLES WITH NOMINAL 7/16" CROWN AND 1-1/8" LENGTH FOR 1/2" SHEATHING AND 1-1/2" LENGTH FOR 25/32" SHEATHING CONFORMING TO TABLE 2304.9.1 OF IBC. 5. PANEL SUPPORTS AT 16" (20" IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED). CASING OR FINISH NAILS SPACED 6" ON PANEL EDGES, 12" AT INTERMEDIATE 6. PANEL SUPPORTS AT 24". CASING OR FINISH NAILS SPACED 6" ON PANEL EDGES, 12" AT INTERMEDIATE 7. WHEN 3X SOLE PLATE IS USED, END NAILING SHALL BE 2-30d BOX OR COMMON NAILS TO STUD. ~ NAILING SCHEDULE BACKFILL - CONTINUOUS DURING OPERATION TO VERIFY USE OF PROPER MATERIALS, DENSITIES, LIFT THICKNESS AND SUBGRADE PRIOR TO BACK FILL HAS BEEN PREPARED PROPERLY

SOILS: IBC 1704.7

COMPACTION SITE PREPARATION - PERIODIC TO VERIFY MATERIAL AT BASE OF EXCAVATION IS ADEQUATE TO ACHIEVE BEARING CAPACITY, EXCAVATION IS EXTENDED TO PROPER DEPTH AND REACH PROPER MATERIAL AND OBSERVATION OF

AT THE TIME OF FRESH CONCRETE PLACEMENT IT SHALL BE TESTED PER ACI 318 CHAPTER 5. A. A MINIMUM OF (5) STRENGTH TEST SHALL BE COMPLETED FOR EACH PROJECT. STRENGTH TESTS ARE NOT REQUIRED IF TOTAL QUANTITY OF CONCRETE IS LESS THAN 50 YDS, PROVIDED EVIDENCE OF SATISFACTORY STRENGTH IS

PROVIDED TO THE EOR & BUILDING OFFICIAL B. NOT LESS THAN ONE FOR EACH 150 YDS PLACED EACH DAY.

L. JOIST TO SILL OR GIRDER, TOENAIL

BRIDGING TO JOIST, TOENAIL EACH END

1. 1"X6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL

WIDER THAN 1"X6" SUBFLOOR TO EACH JOIST, FACE NAIL

SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL

DOUBLE STUDS, FACE NAIL

23. BUILT-UP CORNER STUDS

28. FIBERBOARD SHEATHING

1/2" OR LESS

25/32"

SUPPORTS.

4. BUILT-UP GIRDER AND BEAMS

DOUBLED TOP PLATES, TYPICAL FACE NAI

TOP PLATES, LAPS AND INTERSECTIONS, FACE NA

CONTINUOUS HEADER TO STUD, TOENAIL
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL

1"X8" SHEATHING OR LESS TO EACH BEARING, FACE NAIL

2. WIDER THAN 1"X8" SHEATHING TO EACH BEARING, FACE NAIL

9. RAFTER TO PLATE, TOE NAIL ). 1" BRACE TO EACH STUD AND PLATE, FACE NAIL

5. WOOD STRUCTURAL AND PARTICLE BOAR '. PANEL SIDING (TO FRAMING):

RIM JOIST TO TOP PLATE, TOENAIL

**CONTINUOUS HEADER, TWO PIECES** 

<u>CEILING JOIST TO PLATE, TOENAIL</u>

SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL

SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS

DOUBLE TOP PLATES, LAP SPLICE (MIN) SEE F4/S2.0

1. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOE NAIL

C. NOT LESS THAN ONE FOR EACH 5.000 SF OF SLAB OR WALL PLACED EACH DAY.

IF THE TOTAL REQUIRED TESTS PER 2 & 3 WILL RESULT IN LESS THAN (5) TESTS ADDITIONAL BATCHES OF CONCRETE SHALL BE SAMPLED TO ENSURE THE MINIMUM IS MET. INSTALLATION OF ANCHORS IN HARDENED CONCRETE - PERIODIC INSPECTIONS REQUIRED TO VERIFY TYPE, SIZE AND

MASONRY IBC 1704.5

WOOD CONSTRUCTION

PERIODIC INSPECTIONS OF ALL WOOD DIAPHRAGMS AND SHEAR WALLS ARE REQUIRED WHEN THE FASTENER SPACING IS 4" OR LESS. THIS NEEDS TO BE COMPLETED PRIOR TO THE INSTALLATION OF ANY COVERING ON THE SHEATHING. SPECIAL INSPECTION OF THE TEMPORARY & PERMANENT RESTRAINTS/ BRACING IS INSTALLED PER THE APPROVED TRUSS PACKAGE.

TESTING & OBSERVATION NOTES

′ 1" = 1'-0"

PREFABRICATED WOOD TRUSSES

1. CODES AND FABRICATION: MANUFACTURER'S APPROVED ICBO PRODUCT EVALUATION REPORTS. 2. GRADE STAMPED DOUGLAS FIR/LARCH NO. 2 OR BETTER, OR AS REQ'D BY DESIGN. 3. DESIGN REQUIREMENTS:

TOP CHORD DEAD LOAD 12 PSF, BOTTOM CHORD DEAD LOAD 8 PSF DEFLECTION: ROOF TOTAL LOAD DEFLECTION SHALL NOT EXCEED

L/280. LIVE LOAD DEFLECTION SHALL NOT EXCEED L/360. 4. CALCULATIONS & SHOP DRAWINGS: SUBMIT FOR REVIEW, SHOP DRAWINGS AND CALCULATIONS BY A LICENSED ENGINEER IN THE STATE OF THE PROJECT, FOR THE DESIGN LOADS, INCLUDING MAXIMUM REACTION, SHEAR, MOMENT, AND DEFLECTION IN

TRUSSES SHOWN ON THE DRAWINGS ARE SCHEMATIC AND MAY REQUIRE SIZE OR SPACING MODIFICATIONS. VERIFY WITH BEARING LOCATIONS BEFORE MAKING ANY CHANGES. 5. BLOCKING, BRACING AND BRIDGING: AS REQUIRED BY THE MANUFACTURER'S APPROVED PRODUCT EVALUATION

COMPARISON TO THE ALLOWABLES. SIZE THE TOP CHORD FOR THE DIAPHRAGM NAILING AND A 2X MINIMUM NOMINAL WIDTH. THE

REPORTS, THE IBC, ICBO APPROVALS, THE CALCULATIONS AND THE DRAWINGS. 6. TRUSS CHANGES: OBTAIN WRITTEN CONSENT FROM THE TRUSS MFR ENGINEER TO CHANGE THE TRUSS TYPE,

WIDTH, CHORD DEPTH, TRUSS SHAPE OR SPACING. 7. TRUSS MARKINGS: EACH TRUSS SHALL BE LEGIBLY BRANDED, MARKED OR OTHERWISE HAVE PERMANENTLY AFFIXED THERETO THE FOLLOWING INFORMATION WITHIN 2' OF THE CENTER OF THE SPAN ON THE FACE OF THE BOTTOM CHORD:

A) IDENTITY OF MANUFACTURER B) DESIGN LOAD C) SPACING OF TRUSSES

LOADS ARE ACCOUNTED FOR IN TRUSS DESIGN.

8. TRUSS MFR SHALL CERTIFY THAT ALL LOADING IS PER LOCAL CONDITIONS STATED ON 'STRUCTURAL DESIGN INFORMATION' NOTES. 9. TRUSS MFR SHALL CERTIFY THAT THE CALCULATIONS REFLECT COMPLIANCE WITH THE LATES EDITION OF IBC FOR UNBALANCED SNOW LOADS, FOR DRIFT LOADING, FOR IMPACT LOADING AS NOTED ON THE PLANS. ALL EAVES SHALL BE DESIGNED FOR 2 TIMES THE LIVE LOAD.

10. ALL TRUSS TO TRUSS CONNECTIONS SHALL BE THE SOLE RESPONSIBILITY OF THE TRUSS MANUFACTURER. 11. STAMPED SHOP DRAWINGS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL AND ENGINEER FOR REVIEW BEFORE ANY FABRICATION. 12. TRUSS HANDLING AND JOB-SITE STORAGE SHALL BE PER TPI STANDARDS AND NOT AFFECT TRUSS PERFORMANCE. 13. CONFIRM WEIGHT, SIZE AND LOCATION OF MECHANICAL EQUIPMENT PRIOR TO DESIGN OF TRUSSES TO ENSURE POINT

PREFABRICATED TRUSS NOTES

SOILS AND FOUNDATIONS

NAILING 1

4-8d,TOENAIL OR 2-16d, END NAIL

16d @ 16" o.c. ALONG EACH EDGE

3-16d @ 16

8d @ 6" o.c.

16d @ 24" o.c.

No. 11 ga.

No. 16 ga.

No. 11 ga. 4

No. 16 ga. <sup>5</sup>

20d @ 32" o.c. AT TOP AND

AT ENDS AND AT EACH SPLICE

2-16d AT FACH BEARING

BOTTOM AND STAGGERED 2-20d

3-8d

2-8d

A. FOUNDATIONS HAVE BEEN DESIGNED BASED AN ALLOWABLE BEARING PRESSURE OF 1,500 PSF

B. CONSTRUCTION MATERAIL: EARTHWORK 1) GRANDULAR STRUCTURAL FILL

STRUCTURAL FILL SHALL MEET THE FOLLOWING GRADATION SIEVE SIZE % PASSING BY WEIGHT

3 INCH 1 1/2" 85-100 NO. 4 30-60

10 MAXIMUM (A) PLACED IN NOT GREATER THAN 8" THICK LIFTS COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY AS

(B) MOISTURE CONTENT OF THE STRUCTURAL FILL AT THE TIME OF COMPACTION SHOULD BE WITHIN 3% OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698 STRUCTURAL FILL SHALL MEET THE FOLLOWING CONDITIONS.

(I) SAND & GRAVEL SIZE PARTICLES COMPRISING THE FILL SHOULD BE HARD DURABLE ROCK MATERIALS THAT WILL NOT DEGRADE BY MOISTENING OR UNDER MECHANICAL ACTION OF THE COMPACTION EQUIPMENT; I.E. NO SHALE OR OTHER CLAYEY ROCK TYPES (II) THE BINDER/FINES SHOULD HAVE MAXIMUM LIQUID LIMIT AND PLASTIC INDEX VALUES OF 25 & 10% RESPECTIVELY

(III) NO FROZEN, ORGANIC OR OTHER DELETERIOUS MATERIALS SHOULD BE PRESENT IN THE STRUCTURAL FILL 2) OPEN GRADED ANGULAR CRUSHED ROCK SHALL BE BETWEEN 1/4 TO 3/4" AND COMPACTED USING VIBRATORY COMPACTION METHODS UNTIL WELL KEYED

3) DRAINAGE AGGREGATE SHALL BE 1/4 TO 1 1/2" OPEN GRADED DRAINAGE AGGREGATE

4) NON-WOVEN DRAINAGE GEOTEXTILE SHALL BE MIRAFI 140N OR APPROVED EQUAL. EDGES SHALL BE OVERLAPPED AND HELD IN PLACE DURING BACK FILL OPERATION TO ENSURE THE DRAIN AGGREGATE IS COMPLETELY ENCLOSED FOLLOWING BACKFILL 5) FOUNDATION DRAIN SHALL BE 4" DIAMETER SLOTTED HIGH DENSITY POLYETHYLENE PIPE AND FITTINGS MEETING ASTM F405. ADVANCED DRAINAGE SYSTEM INC (ADS) PIPE OR APPROVED EQUAL PIPE SHALL HAVE A 3" SLOT PATTERN WITH SLOTS @ 120". SLOTS

SHALL BE A MAXIMUM OF .875" LONG AND .12" WIDE. DRAIN SHALL BE SLOPED AT A MINIMUM OF .02FT/FT FOUNDATION DRAIN SHALL BE ENCLOSED IN A MINIMUM OF A 2'0" BY 2'0" AREA OF DRAINAGE AGGREGATE WRAPPED IN NON-WOVEN DRAINAGE GEOTEXTILE

6) VAPOR BARRIER SHALL BE 10 MIL WR MEADOWS PERMIATOR, STEGO INDUSTRIES STEGO WRAP CLASS A OR APPROVED EQUAL. ALL SEAMS SHALL BE OVERLAPPED & SEALED WITH MANUFACTURER APPROVED TAPE. ALL PROTRUSIONS & PENETRATIONS SHALL BE SEALED. HOLES SHALL BE REPAIRED. SEAL THE VAPOR BARRIER TO THE VERTICAL FACE OF THE STEM WALL AT THIS SLAB LOCATION. INSTALLATION SHALL MEET ASTM E 1643-C STANDARD PRACTICE FOR INSTALLATION OF VAPOR RETARDER USED IN CONTACT WITH EARTH OR FILL UNDER CONCRETE SLAB

7) DAMPPROOFING SHALL BE BASF HYDROCIDE 700B COLD APPLIED WATER BASED REINFORCED EMULSIFIED ASPHALTIC DAMPPROOFING OR APPROVED EQUAL. HYDROCIDE 700B IS AN ASPHALT-BASED CLAY EMULSION WITH FIBERS. APPLICATION SHALL BE APPLIED BY BRUSH, ROLLER, OR SPRAY WITH THE PROPER EQUIPMENT PER MANUFACTURER RECOMMENDATIONS. MATERIALS AND INSTALLATION SHALL MEET ASTM D 1227, TYPE 2, CLASS 1, AND ASTM D 1187, TYPE 1.

1) THE REMOVAL OF TOPSOIL AND OTHER ORGANIC MATERIAL, INCLUDING THE CLEARING AND GRUBBING OF SURFICIAL VEGETATION AND ROOT ZONES, SHOULD BE ACCOMPLISHED WITHIN THE CONSTRUCTION ZONE PRIOR TO ANY EARTHWORK CONSTRUCTION. RUBBER TIRED CONSTRUCTION TRAFFIC BE LIMITED TO AREA AT LEAST 2 FEET ABOVE GRADE. ALL EXISTING STRUCTURES ENCOUNTERED IN THE FOOTPRINT SHALL BE REMOVED & VOIDS FILLED WITH GRANDULAR STRUCTURAL FILL. 2) SURFACE DRAINAGE SHOULD BE ESTABLISHED TO DIRECT RUNOFF AWAY FROM THE CONSTRUCTION AREA

3) CARE SHOULD BE TAKEN TO MINIMIZE CONSTRUCTION TRAFFIC OVER MOISTURE SENSITIVE SUBGRADE SOILS. DURING WET WEATHER CONDITIONS, IN AREAS WHERE HEAVY CONSTRUCTION TRAFFIC IS ANTICIPATED, HAUL ROADS WITH A MINIMUM GRAVEL THICKNESS OF 2 FEET SHOULD BE CONSTRUCTED OVER THE PLANNED SUBGRADE WITH A GEOTEXTILE SEPARATION

4) THE STABILITY OF CONSTRUCTION EXCAVATIONS AND ASSOCIATED WORKER SAFETY ARE THE RESPONSIBILITY OF THE CONTRACTOR IN ACCORDANCE WITH CURRENT OSHA REGULATIONS: THIS RESPONSIBILITY MAY REQUIRE DESIGN BY A REGISTERED PROFESSIONAL ENGINEER BASED ON THE PREDOMINANT SOIL TYPES ENCOUNTERED. ACTUAL SUBSURFACE CONDITIONS AT THE TIME OF EXCAVATION SHOULD BE OBSERVED BY A GEOTECHNICAL ENGINEER TO DETERMINE WHETHER SLOPE FLATTENING. BRACING OR OTHER STABILIZATION IS NECESSARY DUE TO SEEPAGE OR OTHER UNEXPECTED CONDITIONS 5) WHEN SILT & FINE GRAINED SOILS ARE ENCOUNTERED FINAL EXCAVATIONS SHALL BE COMPLETED WITH A SMOOTH-LIPPED BUCKETS ATTACHED TO EXCAVATORS WORKING OUTSIDE THE EXCAVATION TO REDUCE THE RISK OF DISTURBANCE OF THE SILT AND CLAY BEARING SURFACE. EXCAVATION SHALL NOT BE COMPLETED WITH AN EXCAVATOR WITH TEETH. THE BASE OF THE EXCAVATION SHALL BE OBSERVED BY THE EOR/ OR A GEOTECHNICAL ENGINEER. ANY AREAS OF RUTTING, EXCESSIVE DEFORMATION, OR OTHER NON-UNIFORM PERFORMANCE OF THE NATIVE SURFACE OR THE BACKFILL SHALL BE REMOVED AND REPLACED BY STRUCTURAL FILL

1) CONTINUOUS WALL AND SPREAD FOOTING FOUNDATIONS SHALL BE ESTABLISHED ON UNDISTURBED NATIVE, OR COMPACTED GRANDULAR STRUCTURAL FILL. CONTINUOUS WALL AND SPREAD FOOTING FOUNDATIONS SHOULD HAVE MINIMUM FOOTING WIDTHS OF 18 INCHES AND 2 FT, RESPECTIVELY UNLESS NOTED OTHERWISE ON PLANS.

2)EXTERIOR WALL FOOTINGS SHOULD BE EMBEDDED A MINIMUM OF 3.5 FEET BELOW EXTERIOR GRADES TO ESTABLISH FROST PROTECTION. FOUNDATION DRAIN IS REQUIRED.

3)BACKFILL COMPACTION WITHIN 5 FEET OF FOUNDATION WALLS SHOULD BE CONDUCTED USING HAND OPERATED TAMPING EQUIPMENT ONLY.

4) INTERIOR SLAB PREPARATION IN PREPARATION FOR SLAB PLACEMENT, THE SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH ITEM C1. AREAS OF UNSUITABLE FILL MATERIAL OR WHERE RUTTING, YIELDING, OR OTHER NON-UNIFORM SUBGRADE PERFORMANCE IS OBSERVED, SHALL B REMOVED OR RECOMPACTED IF REQUIRED. GRADE SHALL BE RAISED BY INSTALLATION OF GRANDULAR STRUCTURAL FILL (B1 ABOVE)

TO THE UNDERSIDE OF THE ANGULAR BASE COURSE. A NOMINAL 8-INCH THICK LAYER OF OPEN-GRADED ANGULAR CRUSHED ROCK TO BE INSTALLED FOR A CAPILLARY BREAK BENEATH THE CONCRETE SLAB. THE UPPER 2 INCHES OF THIS 8 INCH THICK LAYER CAN BE SUBSTITUTED WITH 3/4 INCH MINUS CRUSHED ROCK TO PROVIDE A COMPACT SURFACE FOR CONSTRUCTION ACTIVITIES. THE SLAB-ON GRADE BASE COURSE SHOULD BE COMPACTED USING VIBRATORY COMPACTION METHODS UNTIL WELL KEYED. A VAPOR BARRIER SHALL BE INSTALLED UNDER THE SLAB 5) FXTERIOR SLAB PREPARATION

(I) EXTERIOR SLABS AT ENTRYWAYS FIXED TO THE BUILDING SHALL BE PROTECTED AGAINST FROST HEAVES (II) A MINIMUM OF 18" OF GRANDULAR STRUCTURAL FILL SHALL BE INSTALLED UNDER A 6" LAYER OF OPEN GRADED ANGULAR ROCK UNDERNEATH SLABS, ALL ITEMS SHALL BE COMPACTED PER THE ABOVE SPECIFICATIONS

E. QUALITY CONTROL SHALL BE COMPLETED PER THE REQUIREMENTS OF THE TESTING AND OBSERVATION NOTES.

7 SOILS & GEOTECHNICAL NOTES

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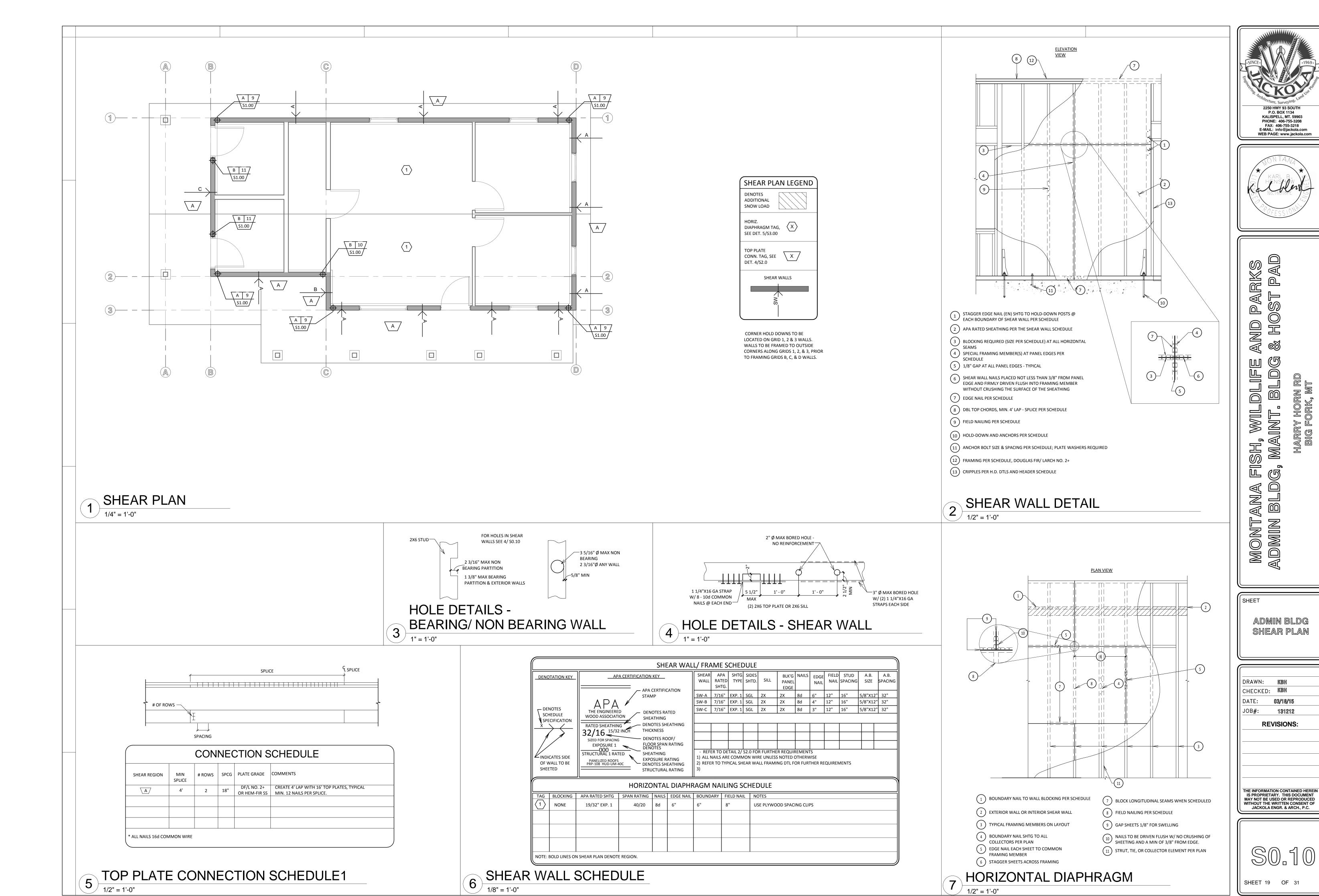
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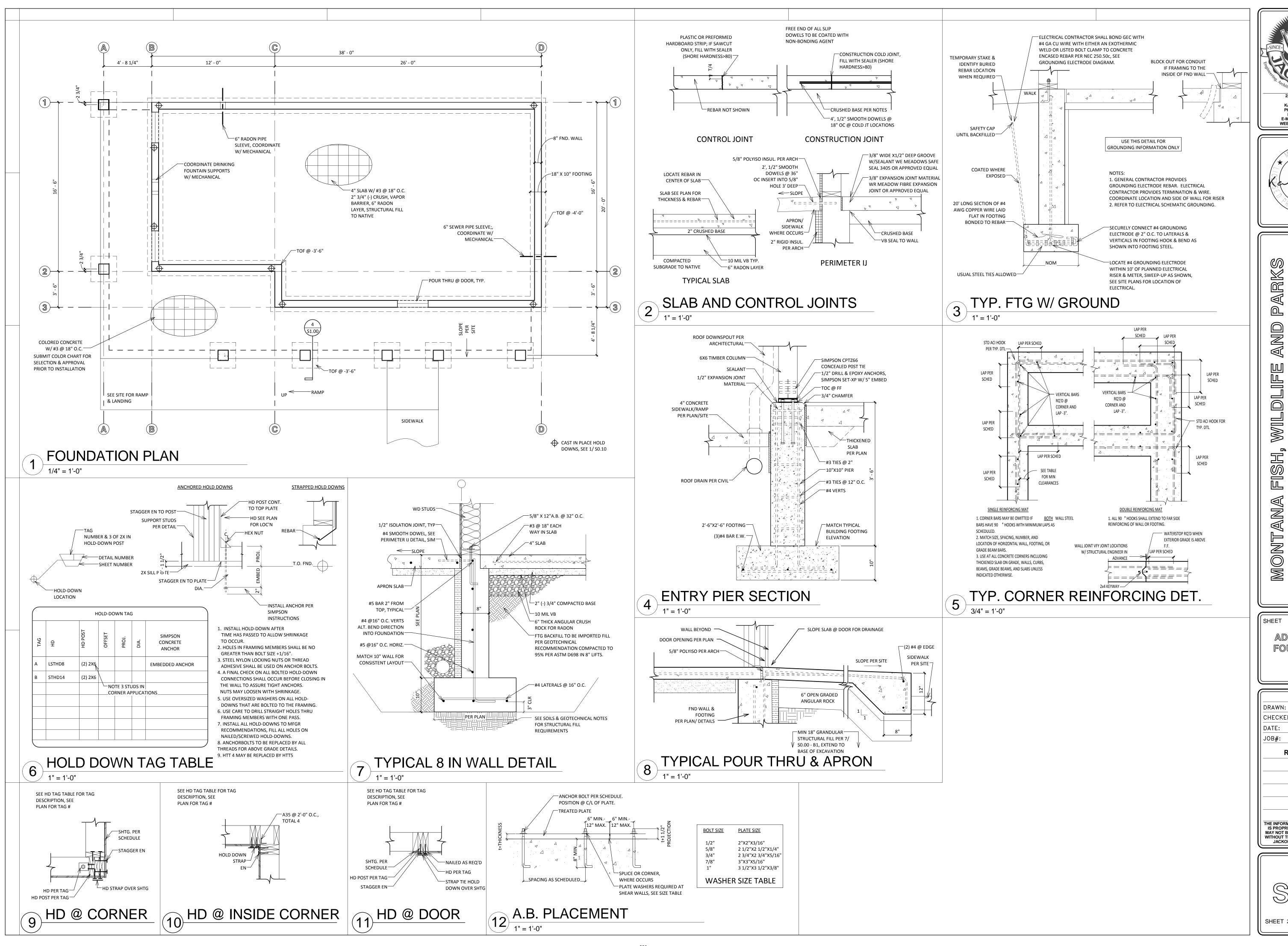
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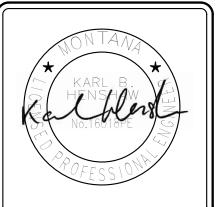
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HOST AND BLDG WILDL FISH, WIL G, MAINT. **5** MONTANA ADMIN BLD 

SHEET ADMIN BLDG FOUNDATION PLAN

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